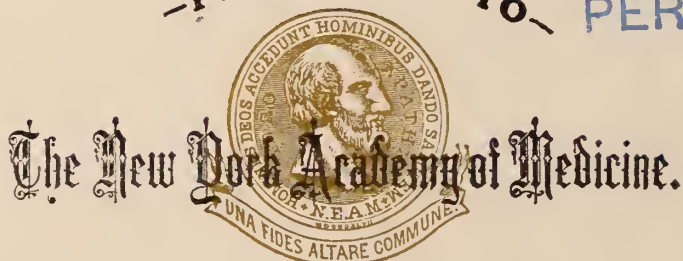


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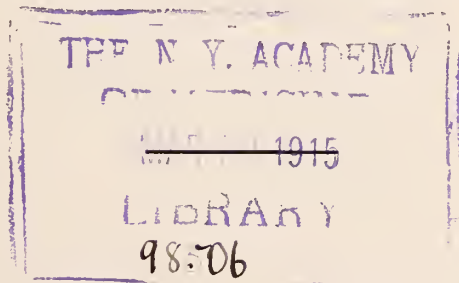
THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY
UNDER THE DIRECTION OF THE COUNCIL

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.
Editor and Manager

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THE INDIANA STATE MEDICAL ASSOCIATION

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VOLUME VII

FORT WAYNE, IND., JANUARY 15, 1914

NUMBER 1

SPECIAL ARTICLES

THE YEAR'S PROGRESS IN MEDICINE

CHARLES G. BEALL, M.D.
FORT WAYNE

"The ultimate end of the science of medicine is the cure and prevention of disease."

In briefly reviewing the progress that internal medicine has made during the past year we can best approach the subject from two standpoints: first, the experimental advances and the brilliant things they promise for the future; second, the advances that time and clinical experience have demonstrated to be true advances, it being realized that judgment of the value of new methods and procedures is exceedingly difficult, and that in some instances it will take years to determine their final worth. In an article of this character much must of necessity be omitted, but it has been my endeavor to include what in my judgment have been more important real advances.

The pneumococcus has deservedly received a large share of attention and new methods of treatment worked out along new and the already older lines of antisera and vaccines.

The experiments of Morgenroth are exceedingly interesting. They were made by injecting mice with a strain of pneumococci which always proved fatal when injected. By injecting eryth-hydrocuprein hydrochlorate before the inoculation 90 per cent. of the mice was saved, and in 50 per cent. death was prevented when the salt was injected after the infection. These experiments are described by Sir A. E. Wright "as destined to stand out as a landmark in the history of pharmacology because they furnish the first demonstration of the possibility of preventing and curing a bacterial, as distinguished from a protozoal or spirochetal infection by the

administration of a drug." Of similar import are the experiments of Marks,¹ who found that hexamethylin in suitable doses protects animals from inoculations of the meningococcus.

With an ideal series of control cases extending over a period of three years, Rosenow and Hektoen² have obtained a reduction in mortality of 14.5 per cent. in pneumonia by treatment with a specially prepared vaccine. This is the first instance that I am aware of a therapeutic procedure proving of benefit in pneumonia in so large a series of cases with an equal number of practically perfect control cases. Most of the cases were treated in the Cook County Hospital. During the past three winters every alternate case of pneumonia admitted received the treatment, the other cases serving as controls. Considering the class of patients admitted, many of them being alcoholics, and the stage of the disease in which they are admitted the results are worthy of very serious attention.

Of much practical interest is the study made by Poor³ of the relative value of the antirabic treatment with freshly prepared virus compared with that sent to a distance. Of 2,108 cases which were treated with virus sent from the laboratory the mortality was 0.06 per cent. Of 737 cases treated at the laboratory the mortality was 0.9 per cent. Excluding cases which died during the period of observation, the results were a mortality of 0.0028 per cent. in cases treated at the patients' homes, as against 0.0018 per cent. in the cases treated at the laboratory. This would seem to prove that for all practical purposes satisfactory results might be obtained with the virus sent out from the laboratory.

Clock's⁴ remarkable report of 117 cases of infantile diarrhea treated by intestinal implanta-

1. Jour. Exp. Med., xiv, 116.

2. Jour. A. M. A., lxi, 2203.

3. Research Lab. Dept. of Health, New York City.

4. Jour. A. M. A., lxi, 164.

tion of the *Bacillus lactis bulgaricus* with but one death warrants a thorough test during the coming summer. It is of the greatest importance that the preparation administered contain these organisms in a viable state.

The treatment of pertussis by a vaccine made from the Bordet-Gengou bacillus seems to promise something but as yet there has appeared no extended series of cases so treated, with suitable control cases.

Another hitherto obscure and fatal disease is apparently yielding to science since Bunting and Yates⁵ have succeeded in cultivating a diphtheroid organism from four cases of Hodgkin's disease and by inoculating a monkey with one of these cultures produced a glandular enlargement which was histologically identical with the glandular changes found in Hodgkin's disease. Billings and Rosenow⁶ treated cases of Hodgkin's disease with a vaccine made from this organism and had an apparent cure in one case, with improvement in others. The Roentgen rays were used in connection with this vaccine, as it was felt that the patients should have the benefit of every therapeutic measure which has proved of worth.

Our knowledge of the pathology and treatment of syphilis is still advancing. During the past year Noguchi⁷ has demonstrated the *Spirocheta pallida* in the central nervous system in cases of general paresis and tabes. Swift and Ellis⁸ have very carefully worked out a method of treating intractable syphilitic infections of the nervous system (including tabes and paresis) by injecting salvarsanized serum directly into the spinal canal. The favorable results of these workers have been confirmed by others. The method consists of giving an intravenous dose of salvarsan or neosalvarsan and one hour later withdrawing 50 to 100 c.c. of blood, allow the serum to separate and then heat the serum for half an hour at 56 C. Twelve c.c. of this serum is made up to 30 c.c. with normal salt solution. After withdrawing 10 to 30 c.c. of cerebrospinal fluid by a Quinke puncture, the diluted serum is injected through the same needle into the spinal canal. A number of reports have appeared of the successful treatment of persistent cases of Vincent's angina with the local application of salvarsan in glycerin. It is possible that this procedure might prove of benefit in other spirochetal infections, such as noma and also pyorrhea alveolaris, as Noguchi has cultivated three varieties of these organisms from pus coming from

the gums of individuals suffering from this affection.

The Roentgen ray properly used seems to give very satisfactory results in the treatment of enlarged thymus, according to the reports of Wyckoff,⁹ Lange,¹⁰ and Crotti.¹¹ The improvement in the physical and mental development in children was as remarkable as the relief afforded from the symptoms. Experience seems to show that thymus hyperplasia may be one of the factors in producing mild grades of mental deficiency, so that this factor and its possible removal should not be forgotten in backward children.

An enormous amount of radiographic work has been done on gastro-intestinal diseases, so much in fact that no attempt can justly be made here to review the advances in diagnosis and technique that have been brought out. Judgment of the benefits of radium in the cure of malignant disease must still be suspended.

While our knowledge of the cause of hemorrhagic diseases (hemophilia, hemorrhagic disease of the new-born) has advanced, yet the methods of treating them has seemed to have advanced even more rapidly. The numerous articles which have appeared both last year and this year show conclusively that blood serum (human), or better still, the direct transfusion of blood, surpass all other methods.

Rogers¹² method of treating amebic dysentery with emetine hydrochlorid has proved highly satisfactory in his hands and his results have been confirmed by many others. The method consists of the subcutaneous injection of $\frac{1}{2}$ to $1\frac{1}{2}$ grains of emetin hydrochlorid in solution each day for from three to six days. This method, together with aspiration of amebic abscess cavities and injecting the emetin solution into the cavities, has cured the disease. While there have been recurrences of the disease following the treatment, yet the results at present are infinitely more favorable than those with any other method. At first sight this may not seem to be of much interest to the physicians of this state, but the writer knows of a number of instances of this infection occurring in individuals who had never been outside of Indiana.

Although sufficient time has not yet elapsed for a final opinion on the benzol treatment of leukemia, a number of reports have appeared, and most of them have confirmed the favorable results obtained by the originator, Koryani. However,

5. Arch. Int. Med., xii, 236; Jour. A. M. A., lxi, 1803.

6. Jour. A. M. A., lxi.

7. Jour. Exp. Med., Feb. 1, 1913; München. Med. Wehnschr., April 8, 1913.

8. Arch. Int. Med., xii, 331.

9. Cleveland Med. Jour., Vol. xii, November.

10. Proceedings Am. Roentgen Ray Society, Jour. A. M. A., lxi, p. 1841.

11. Jour. A. M. A., ix, 117 and 571.

12. Br. Med. Jour., Aug. 24, 1912, p. 405.

great care must be used in administering the drug, as a number of cases have resulted fatally from benzol poisoning with a blood-picture of extreme leukopenia (200 W. b. c. per cm.).

Of the notable monographs that have approved Cushing's book on "The Pituitary Body and Its Disorders," and Griffin's¹³ article on Banti's disease, deserve mention in a review of medical progress, although both subjects are largely surgical. Vaughn's work on the "Protein Split Products in Relation to Immunity and Disease," which has appeared in various journal articles, now appears in book form. This work bids fair to have the most important bearing on immunology, since Ehrlich made his announcement of the side-chain theory.

In conclusion, let us bear in mind the words of Wright that "it is an indefensible proceeding to administer a drug concerning which we have neither *a priori* grounds for believing that it will, nor evidence to show that it does, do what is intended. We condemn treatment which is simple random experimentation."

227 East Washington Boulevard.

SOME NOTES ON THE SURGERY AND SURGICAL LITERATURE OF THE YEAR 1913

J. H. OLIVER, A.M., M.D.

Professor of Surgery, Indiana University School of
Medicine

INDIANAPOLIS

The year 1913, whose requiem is still sounding in our ears, will go down in surgical history as a hard-working but not a brilliant or epoch-making cycle.

The greatest problem before the medical world to-day is the causation and cure of malignant neoplasms. Ehrlich is optimistic enough to think that the beginning of the end is in sight, but the great majority of conservative investigators seem to regretfully disagree. As in the past, early diagnosis and thorough excision of precancerous and cancerous processes with careful block dissection of dangerous lymphatic areas, when possible, is our greatest dependence. Much is claimed for radium by men of sterling ability, whose opinions are worthy of all consideration, but as yet nothing has been definitely proven which has not been previously claimed for the Roentgen ray, the limitations of which are now quite fully established. Mesothorium and thorium X, more potent factors of the same kind, are but faint hopes barely visible on the horizon.

In brain surgery the clinical reports on the removal of tumors still have a doleful sound. Cushing has made wonderful progress in the operative treatment of tumors of the hypophysis, and in his hands the procedure has become comparatively safe. The paper and report of H. H. Tooth, read before the surgical section of the Seventeenth International Medical Congress, bearing the title "The Treatment of Tumors of the Brain and the Indications for Operation," is altogether admirable. It cannot be abstracted; it is too much of an abstract in itself, but in conclusion he says: "The success which has attended the radical treatment of such tumors as the endotheliomata and the heavy mortality against them and most others, tend to induce a vacillating attitude of mind on the one hand in the direction of advising all patients to undergo operation, or, on the other, of shrinking from any form of surgical interference. Neither mental attitude is justifiable. The fact is that most cases of declared intracranial tumor need operation, perhaps sooner than later, and the risk has to be taken. The question is rather what class of operation shall be selected, and I make so bold as to think that if some such commonplace procedure as has been indicated were generally adopted, the immediate postoperative mortality might be sensibly reduced though the general ultimate mortality might not be so greatly affected. But what is quite as important, the survival period might in the majority of cases be greatly prolonged, and after all this is the true test of success in dealing with this class of cases."

Charles H. Mayo, studying his clinical record of 5,000 thyroidectomies, 2,297 of which were of the Basedow type, states that 75 per cent. of the latter variety were cured, and the remaining 25 per cent. were more or less improved, with a mortality running from 1 to 3 per cent. Of the 75 per cent., probably 10 per cent. have some degree of relapse in from one to three years after operation, for which the treatment is practically the same. The unknown agent producing this condition seems to be most frequently conveyed by water and goitrogenous waters when boiled are not infective. Ether preceded by morphin and atropin is still the anesthetic of choice, but in cases where it is contra-indicated free local injections of novocain 0.5 per cent. will permit of extensive dissections. In distorted trachea with danger of collapse, intratracheal anesthesia is indicated.

Crile claims that we can operate now and control the hypothyroidism by the principle of anoci association and not have a single change for the worse at the end of the operation, no

13. Am. Jour. Med. Sc., cxlv, 781.

matter how severe the case, how large the gland or how rapid the pulse beat. The writer's experience with the method of anoci association, while not large enough to enable him to verify these claims *in toto*, is certainly such as to make him very enthusiastic as to its possibilities. Porter reports twenty cases of exophthalmic goiter treated by injections of hot water, and is favorably impressed with the method in selected cases, usually those not amenable to other forms of treatment. Coley announces his return to the typical Bassini operation for radical cure of inguinal hernia, giving as a reason therefor his clinical results, namely, 0.4 per cent. of relapses after the Bassini operation and 1.5 per cent. in cases in which the cord was not transplanted.

McKentry, writing of Padgett's disease of the nipple, urges early excision in all cases, a procedure which in my opinion is mandatory. Early excision and skin grafting of Roentgen-ray burns and ulcers is advocated by a number of our excellent men, both at home and abroad, including Pagensteeher, Turek and others. "It relieves pain, months and years of discomfort and protects from carcinoma. Callison and McKentry¹ write exhaustively of tumors of the carotid body, reporting sixty cases of this rare and formidable disease operated by various surgeons. The paper is complete and satisfying and should be carefully considered and filed for reference.

Concluding an analysis of the recent literature on cervical rib, Charles H. Frazier² says: "There seems to be no unanimity of opinion as to treatment, and too frequently the view is expressed that operation should be performed only on the appearance of severe symptoms. I believe that if any more pressure is at all demonstrable the indication is clear for surgical interference. The operation is not as difficult as is generally made out, and the mortality in the recorded cases is nil. As an accurate skiagram is of prime importance in this condition, the following suggestions of G. Scott are useful: First, there should be no rotation of the bodies of the cervical vertebra. Second, the tube must be accurately centered, the focal ray passing through the thyroid prominence. This brings the center well above the clavicle. Third, the plate should be in close apposition with the cervical spinous processes. This is not always easy on account of the occiput. Fourth, no movement the patient holding his breath. Stereoscopic views are also advised as being much more satisfactory. It is interest-

ing to note that Murphy has operated a number of cases presenting the symptoms of cervical rib in which the trouble was produced by excessive angulation of the first dorsal rib, removal of which gave complete relief.

I have not been able to find much that is of practical value offered this year concerning the surgery of the thoracic cavity. The surgeon, after having fairly conquered the abdomen, seems somewhat hesitant as to its neighbor. Keen once said that the abdominal cavity had become the playground of the surgeon. The thoracic cavity is a very different proposition. Halstead³ writes experimentally of a new method of partially occluding the aorta, both thoracic and abdominal, with bands of aortic tissue or of fascia lata wound spirally around the vessel in place of aluminum bands, the ultimate safety of which he doubted, fearing that the bands so applied would finally cut through the vessel and reports one such case from a foreign clinic. It seems his experiments were rather discouraging.

Matas and Allen⁴ also report experimentally on the practicability of accomplishing the result by "plication or infolding of its walls by means of a lateral parallel suture applied in one or more stages."

The results were not very satisfactory. They conclude as follows: "In the light of our present knowledge, the direct intervention of surgery in the treatment of aortic aneurysm must be restricted to explorations, both abdominal and thoracic, which will permit us to ascertain the relations of the aneurysmal sac to the parent vessel. In a certain number of cases of saccular aneurysm it may be possible to obliterate the communication leading from the sac to the artery by the method of intrasaccular suture. In the majority of cases the operation will have to be limited to methods which will simply tend to reduce the circulation in the sac and thus favor the coagulation of its contents. This may be accomplished by any of the classical methods of wiring or by narrowing the lumen of the vessel immediately above or below the aneurysm by the use of constricting agents, whether metallic (Halstead or Matas or Allen aluminum bands) or tissue strips (aponeurosis, Nassetti aortic, Halstead), or by suture methods such as the plicating procedure." It is observable that the surgeon is kindly allowed much latitude in the selection of his technic. Willy Meyer⁵ presents an exhaustive report on the surgery of the pulmonary artery, which should be carefully studied.

1. Ann. Surg., December, 1913.

2. Progressive Med., March, 1913.

3. Ann. Surg., August, 1913.

4. Ann. Surg., September, 1913.

5. Ann. Surg., August, 1913.

Charles H. Frazier writes briefly but pointedly of pulmonary surgery in the March number of *Progressive Medicine*. He thinks that "despite the hitherto limited success, progress is evident, and that in bronchiectasis, chronic abscess, tuberculosis, actinomycosis and tumors of the lung and pleura, pneumothorax is, *a priori*, not a great danger because of the ever-present adhesions. It cannot be claimed that either differential pressure or intratracheal insufflation have as yet bettered the results in operations for these diseases. Intratracheal ether, however, provides the best anesthetic for this group, and with its accompanying insufflation supports an already limited respiratory function. . . . That these chronic infections are amenable to surgical treatment cannot be denied despite its present doubtful status." . . .

The surgery of the future in tuberculosis, bronchiectasis and chronic abscess of the lung will consist in conservative rather than radical measures. . . . Lung resection is obviously the idealist's ambition in attacking bronchiectasis and chronic abscess. . . . Attempts to perform this operation in one radical procedure have thus far failed. . . . We should attack these cases by performing preliminary operations to produce collapse and shrinkage, thus preparing the chest wall as well as the lung itself for an excision operation. . . . The best surgical treatment for pulmonary tuberculosis is lung compression produced by the injection of nitrogen gas. . . . There is no case of bronchiectasis on record in which a complete cure has resulted from the pleural injections of gases or fluid." . . . The present tendency to treat tuberculosis and abscess of the lung by collapse with air or nitrogen gas has induced Murphy to reprint his original article read before the American Medical Association in 1898 in his volume of *Surgical Clinics* for December, 1913, and with it some historical data and comments which are extremely interesting and which bear out his claim that in the light of recent events he was then about fifteen years ahead of the times. . . .

J. B. Murphy reviews the report of the British Medical Association "on treatment of simple fractures" in a brief but interesting manner in the surgical volume of the 1913 *Practical Medical Series*. However, I would advise all interested to write to the office of the British Medical Association, 429 Strand, London, W. C., for a copy, enclosing 25 cents in silver, the equivalent of the English shilling. It contains the statistics, report and conclusions of the committee, and also papers by Lambotte of Antwerp, Lane

of London, Lucas-Champonnière of Paris, Steinman of Bonn, and Drs. Bardenheuer, Grafsner and Schrecker of Cologne. It is impossible to abstract it and do justice, and it contains the essence of the treatment of this class of injuries as practiced by the foreign surgeons of to-day. I will take the liberty, however, of reproducing the thirteen paragraphs of conclusion:

1. The statistics relative to the non-operative treatment of fractures of the shafts of the long bones in children (under the age of 15 years), with the exception of fractures of both bones of the forearm, show as a rule a high percentage of good results. These are unlikely to be improved on materially by any other method of treatment. Operative results in children expressed in percentages, are approximately the same as the non-operative. The relative figures are: non-operative cases (cases 1,017), 90.5 per cent. good functional results (see Table V, page 1526). Operative cases (cases 64), 93.6 per cent. good functional results (see Table V, page 1526).

2. It is possible either by non-operative or by operative treatment to obtain a high percentage of good results in children.

3. In comparison with the non-operative results in children, the aggregate results of non-operative treatment in those past childhood (i. e., over the age of 15 years) are not satisfactory. (See Table V, page 1526.)

4. From the analysis of the age groups it is clear that there is a progressive depreciation of the functional result of non-operative treatment as age advances, that is to say, the older the patient the worse the result. (See Table VI, page 1526.)

5. In cases treated by immediate operation, the deleterious influence of age on the functional result is less marked.

6. In nearly all age groups, operative cases show a higher percentage of good results than non-operative cases. (See Table I, page 1508.)

7. Although the functional result may be good with an indifferent anatomic result, the most certain way to obtain functional result is to secure a good anatomic result. (See first paragraph, page 1525.)

8. No method, whether non-operative or operative, which does not definitely promise a good anatomical result, should be accepted as the method of choice. For this reason mobilization and massage by themselves have not been found to secure a high percentage of good results. They are, however, valuable supplementary methods of treatment. Similarly, of operative methods,

those which secure reposition and absolute fixation of the fragments yield better results than the methods which fall short of this; imperfect fixation of the fragments by wire or other suture has been found to be an unsatisfactory procedure in the treatment of fractures of the long bones, with the exception of the olecranon process of the ulna.

9. Operative treatment should not be regarded as a method to be employed in consequence of the failure of non-operative measures, as the results of secondary operations (Classes B and C) compare very favorably with those of immediate operations (Class A). See Table IV, page 1525.) In order to secure the most satisfactory results from operative treatment, it should be resorted to as soon after the accident as practicable.

10. It is necessary to insist that the operative treatment of fractures requires special skill and experience, and such facilities and surroundings as will insure asepsis. It is therefore not a method to be undertaken except by those who have constant practice and experience in such surgical procedures.

11. A considerable proportion of the failures of operative treatment are due to infection of the wound, a possibility which may occur even with the best technic.

12. The mortality directly due to the operative treatment of simple fractures of the long bones has been found to be so small that it cannot be urged as a sufficient reason against operative treatment. (See Table X, page 1528.)

13. For surgeons and practitioners who are unable to avail themselves of the operative method, the non-operative procedures are likely to remain for some time yet the more safe and serviceable.

It was with feelings just a little bit difficult to describe that I witnessed in Lane's clinic in historical old Guy's Hospital during the past summer the immediate plating of all fractures, young and old alike. In one instance in a child $2\frac{1}{2}$ years old with fracture of the upper third of the humerus, the bones were so soft that the screws pulled out a time or two, causing quite a bit of delay. The technic was beautiful, but the patients were subjected to a risk, in my opinion quite unnecessary and unwarranted, and in this country used only in cases that cannot be held satisfactorily in any other way. There is much truth in the statement recently made by W. J. Mayo on his return from a hospital visiting trip abroad that "America is the surgical clearing-house of the world." . . .

The employment of blood transfusion is on the increase and seems this time to have come to stay, although I have lived through two or three reversals of opinion on this subject during the last twenty-five years. B. M. Bernheim of Johns Hopkins offered an excellent paper on this subject at the last meeting of the American Medical Association, which is published in the volume of surgical transactions and is well worth careful consideration. The consensus of opinion seems to be that intravenous infusions of salt solutions have but a transient effect and that the beneficial results are of short duration and on that account transfusion is to be preferred in acute anemias resultant from hemorrhage. Bernheim enumerates a number of diseases in which he considers transfusion as potential as a therapeutic agent and thinks that it has been neglected. Tincture of iodine is still considered the preparatory antiseptic agent of choice and in many clinics the wound edges are touched at the completion of the operation and once or twice afterward, notably at the removal of the stitches. Dry dressings or alcohol packs (95 per cent.) the latter especially in traumatic lacerations are in general use and it is interesting to know that alcohol dressings were first advocated and used by John E. Link of Terre Haute, Ind., over a quarter of a century ago.

Alcohol was also his general anesthetic of choice, and under alcohol anesthesia he did all his work in a manner which he claimed to be perfectly satisfactory. There were six papers on anesthesia and allied subjects read before the International Medical Congress and five at the meeting of the American Medical Association, in which all things pertaining to general and local anesthesia were broadly discussed. These can be read in the respective reports of the proceedings of these meetings. Falk has a brief but interesting article on vapor anesthesia in the April 5 number of the *Medical Record*, in which the Gwathmey vapor apparatus is described and the advantages of warm ether vapor accurately admixed with air are duly exploited. Ether by the drop method, however, still holds its well-deserved supremacy and the scope of nitrous oxid and oxygen is rapidly enlarging. It has been demonstrated, I think, beyond a doubt, that spinal anesthesia has a field, but it is a very limited one, and the same can be said of intratracheal insufflation. But what excuse can be offered for intravenous and rectal methods, with their added risk, remains to be demonstrated. Novocain is the local anesthetic of choice on account of its greater safety, and Dubar has suggested that solutions for infiltration be colored

with methylene-blue so that the anesthetized areas can be traced in spite of iodine discoloration.

It would appear to the writer, from his perusal of the literature on technic and his personal observation in a number of hospitals and clinics, both at home and abroad, during the year passed, that the surgeon is learning to keep his fingers out of wounds and that the gentle manipulation of tissue produces a minimum of shock and is conducive to rapid repair.

THE YEAR'S PROGRESS IN PATHOLOGY AND BACTERIOLOGY

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Thirty-three years ago, when the International Medical Congress met in London, the charge was raised that although many Americans were present there and took an active part in the proceedings, yet they furnished only a single short communication in the Section on Pathology and Bacteriology, so little was this subject then being studied and appreciated in America. In the third of a century that has since elapsed what a wonderful change has occurred! The development of great centers of medical research in this country has been truly remarkable. In these great centers, liberally endowed and equipped with all the necessary facilities for investigating the unsolved problems of medicine, are now actively working, under the guidance and inspiration of the great leaders of medical thought in this country, selected groups of men whose ambition is to contribute each his own share—be it great or small—to a true understanding of the mysteries of medicine. It is the brilliant record of the successes that these men have accomplished that constitutes the review of the progress made during the year in pathology and bacteriology. What a debt of gratitude we owe them, especially when we realize that practically all of the big successes achieved during the year were reported from American laboratories! Indeed, the one great medical center in this country, the Rockefeller Institute for Medical Research, contributed more than any other in the world. In fact, so numerous and so diverse are the notable contributions submitted from that source that it must now be ranked as one of the foremost institutions of its kind.

Very conspicuous in the record of the year's progress are the names of Flexner and Noguchi. They¹ have at last succeeded in establishing the

etiology of epidemic poliomyelitis. By a special original method they succeeded in isolating and cultivating from the nervous tissues of human beings and monkeys affected with epidemic poliomyelitis the micro-organism which they proved to be the specific parasite causing this disease. The organism consists of a minute globoid body, arranged in pairs, chains or masses, according to the conditions of growth and multiplication. It passes through Berkefeld filters and can be recovered from the filtrate. It has been found in smears and sections made from the nervous tissues of human beings, and of monkeys who were inoculated with the usual virus or with cultures or the filtrate prepared from monkeys previously injected with cultures of the micro-organism. Thus have these investigators completed the required postulates, establishing thereby quite conclusively the etiologic relationship of this parasite to epidemic poliomyelitis. Although its cultural characteristics are those that apply more particularly to the bacteria, the place among living things to which this micro-organism belongs has not yet been definitely determined.

Of equal importance is the recent work of Noguchi,² which seems to have settled the question of the etiology of rabies. By employing the method he originally devised for the cultivation of the spirochete of relapsing fever, he succeeded in isolating and cultivating from the brain or medulla of animals infected with "street," "passage" or "fixed" virus certain "very minute granular and somewhat coarser pleomorphic chromatoïd bodies," the smallest of which are just visible with the aid of very high magnification. By inoculating cultures containing these granular, pleomorphic or nucleated bodies he has reproduced the disease in animals, and from the brains of these animals granular and nucleated bodies in large numbers have been recovered. The exact nature of these bodies is not yet fully known. Here also it seems that the required postulates have been fulfilled, and that the etiology of rabies has been definitely established.

By employing a similar method Noguchi undertook to settle the prevailing controversy as to the etiology of trachoma. The result was a preliminary contribution³ announcing that he has succeeded in isolating and cultivating from cases of human trachoma and inclusion conjunctivitis a living organism presenting the morphologic features characteristic of the so-called trachoma bodies. Whether this organism and trachoma bodies are identical is not yet known.

2. Noguchi: *Ibid.*, September, p. 314; *Berl. klin. Wchnschr.*, October, p. 1931.

3. Noguchi and Cohen: *Jour. Exper. Med.*, November, p. 572.

1. Flexner and Noguchi: *Jour. Exper. Med.*, October, p. 461.

nor has it been possible thus far to reproduce the disease in monkeys. However, with this much progress already made, there can be little doubt but that sooner or later the demonstration of the etiologic relationship or this organism to trachoma will be completed.

Although it had already been generally accepted that the Bordet-Gengou bacillus is the germ causing whooping-cough, yet the actual demonstration of its etiologic relationship was not announced until last year. Mallory⁴ discovered that the minute organisms responsible for this disease are localized between the cilia of the epithelial cells lining the trachea and bronchi. Their irritant action is mostly mechanical, but in addition they secrete a certain amount of toxin. The blood develops a specific antibody, as shown by its power of fixing complement. The specific lesions of the disease can be reproduced experimentally. We know, further, that the organism is present in the sputum in the catarrhal stage, and is most abundant then and in the first two or three weeks of the spasmodic stage of the disease. In view of this work we must all agree with Morse⁵ that it is now conclusively proved that the Bordet-Gengou bacillus, *B. pertussis*, is the direct cause of whooping-cough.

If the recent findings of Bunting and Yates⁶ are further substantiated, the etiology of another obscure disease will have been cleared up. The work which they have contributed on the etiology of Hodgkin's disease is of great value. They have obtained from the affected lymph-nodes pure cultures of a pleomorphic diphtheroid bacillus, and by repeated injections of cultures of this organism into animals they have produced progressive enlargement of a single group of lymph-nodes which show histologic changes identical with those observed in human lymph-nodes in the early stages of Hodgkin's disease. This organism is said to correspond to the one found by Fränkel and Much, and identical with the one isolated by Negri and Mieremet. Some of its biologic reactions have already been worked out, but much remains yet to be learned. Billings and Rosenow⁷ have already contributed a very favorable confirmatory report, and have even attempted the therapeutic application of this discovery. They are now administering a vaccine made of the heat-killed organisms isolated from the

affected lymph-nodes, and report "apparently marked benefit" after this form of therapy in cases of Hodgkin's disease. The evidence thus seems to be almost convincing, and should an etiologic relationship ultimately be definitely proved, the name "*Corynebacterium hodgkini*" is proposed for this micro-organism.

Another important contribution is embodied in the preliminary report⁸ of the first expedition from Harvard University to South America to study certain obscure types of tropical diseases. This work gives us an accurate conception of the disease known as Oroya fever, which is quite prevalent throughout Peru, and the nature of which has hitherto been unknown. It shows that Oroya fever is due to rod-like, more rarely rounded bodies present within the red blood-cells. These bodies are essentially parasites of the red cells, and belong to a group of micro-organisms intermediate between the protozoa and the bacteria. In severe cases of this fever red cells in almost every microscopic field are invaded by these bodies, many of both the rod-like and rounded forms being found in a single cell. In spite of the fact that attempts to cultivate the parasite and animal inoculation with it have thus far been unsuccessful, it must, nevertheless, be looked upon as the causative agent of that severe form of anemia known in Peru as Oroya fever. Until further information as to its nature is obtained, this organism is named "*Bartonella bacilliformis*."

Verruga Peruviana, this work shows, represents an entirely different disease. This disease owes its origin to a virus which can reproduce the characteristic lesions in animals. The success already attained in the study of it offers encouraging hope that the conquest of this disease may ultimately be completed by elaborating a method of vaccination against it.

Uta is the third obscure disease cleared up somewhat by this work. This disease, we are told, is due to a species of *Leishmania*, the flagellate stage of which has already been obtained. It has been reproduced in animals by inoculation from a human case.

Very important from both the scientific and practical standpoint are the recent studies of Cole⁹ and of Dochez and Gillespie¹⁰ on the pneumococcus. With the view of obtaining a specific therapy, they have studied the biologic aspects of pneumococci isolated from human cases of lobar pneumonia. Because of the inconstancy in differences of morphologic and cultural char-

4. Mallory: Jour. Med. Research, March; Am. Jour. Pub. Health, June, vol. vi.

5. Morse: Jour. Am. Med. Assn., May, p. 1678.

6. Bunting and Yates: Arch. Int. Med., August, p. 236; Jour. Am. Med. Assn., November, p. 1803.

7. Billings and Rosenow: Jour. Am. Med. Assn., December, p. 2122.

8. Strong, Tyzzer, Brues, Sellards and Gastiaburu: Ibid., November, p. 1713.

9. Cole: Ibid., August, p. 663.

10. Dochez and Gillespie: Ibid., September, p. 727.

acteristics of variant strains of pneumococci, and since immunologic reactions manifest a peculiar strict specificity, they have adopted the latter as a basis of differentiation, and by means of protection experiments have obtained a primary classification. The reaction induced by injecting into animals virulent cultures of the isolated pneumococcus mixed with protective serums obtained from animals immunized against single varieties serves as a means of detecting the type of the organism tested. If this organism belongs to the same group as that from which the serum has been derived, the animal is protected from its pathogenic effect, whereas if it belongs to a different group, the animal is not protected. Agglutination reactions invariably correspond with these protection reactions. On the basis of these immune reactions it has been possible to classify pneumococci into four groups. Groups 1 and 2 are made up of organisms closely related immunologically to the others of their respective groups. Group 3 consists of pneumococcus or streptococcus mucosus. Whether or not immunologic differences exist between individual members of this group is now being further studied. Group 4 embraces a number of distinct members which manifest all the cultural and common characters of pneumococci, but do not seem to be related to one another so far as can be demonstrated by immune reactions. The important practical conclusion is quite obvious. Unless the curative serum or vaccine employed in any case is homologous with the pneumococcus causing the infection, it will have no therapeutic value; if, on the other hand, it is homologous, it may serve as a very valuable therapeutic measure.

The recent report by Rosenow¹¹ on the transformation of streptococci and the clinical importance of such changes is, indeed, noteworthy. In his work on the transmutation of this organism, he has succeeded in changing a streptococcus into a pneumococcus so completely that "if a bacteriologist can differentiate a typical pneumococcus from a typical streptococcus, then it is possible to transform one into the other." At certain stages in the process of conversion the organism assumes certain specific characteristics by means of which it can be identified, e. g., in the conversion of the hemolytic streptococcus, at a certain stage it is found to assume the reactions and properties characteristic of streptococcus viridans; when its virulence is increased somewhat, it takes on the reactions and biologic properties of the so-called streptococcus rheumaticus; and if its virulence is still further increased, it becomes a typical pneumococcus.

His further demonstration of the great affinity of some varieties of streptococci for the gastric mucosa, and the experimental production of ulcer of the stomach and duodenum by the intravenous injection of proper strains of streptococci, are distinct additions to our meager knowledge of that phase of the biologic properties of these organisms. A contribution of such fundamental importance adds not only to our knowledge of bacteriology, but also to a true understanding of the clinical conditions dependent etiologically on these bacteria.

As a result of the continued activity in studying tissue growth, more definite progress is being made along that line. The striking results obtained by Ingebrigtsen are remarkable. In his studies on degeneration and regeneration of axis cylinders *in vitro* he found¹² that the brains of cats, the spinal ganglia of rabbits and the spinal cord of cats and rabbits developed filaments which must be regarded as true axis cylinders. When these threads are cut off from their origin, they undergo degenerative changes which are observed after twenty hours and which progress until in the following two days they have completely degenerated. After twenty hours the development of new axis cylinders from the proximal part of the cut can be observed. In a later contribution¹³ he demonstrates for the first time in medicine that nerve fibers grow out from pieces of cerebellum and spinal ganglia of young animals when cultivated outside the body in suitable media. These nerve fibers extend into the plasma of the medium unaccompanied by structures of any kind. Obviously, researches into this rather barren field of medicine must yield most welcome additions to our rather scant knowledge of nerve physiology and pathology.

Carrel, whose fame already extends to all corners of the earth, has continued his activity and has added a great deal more to his brilliant record. His epoch-making work on visceral organisms has already been reviewed here.¹⁴ This work he has continued, and in a recent publication¹⁵ he records what progress has been made up to the present and what his plans are for future investigations in this line. It would be unfair to attempt to review in this brief space the magnitude of this great work. In order properly to appreciate the scope of this work, every physician should study the original article. In his further studies on tissue growth to discover some of the factors determining the growth of

12. Ingebrigtsen: Jour. Exper. Med., February, p. 182.

13. Ingebrigtsen: Ibid., October, p. 412.

14. Rhamy: Jour. Ind. State Med. Assn., January, p. 8.

15. Carrel: Jour. Exper. Med., August, p. 155.

11. Rosenow: Ibid., November, 2007.

tissues and the laws of cell dynamics, Carrel's success has been equally remarkable. In his latest contribution¹⁶ he describes his work with connective tissue from a fragment of chick embryo heart which had been pulsating *in vitro* for 104 days and which was still alive and active after sixteen months of independent life, having gone through more than 190 passages. Moreover, its rate of growth at the end of that time equalled or even exceeded that of similar tissue taken from an 8-day-old chick embryo. Thus he shows that time has no effect on the tissues isolated from the organism and kept alive by the newer artificial methods, and that such tissues are always in a condition of real life, since their cells, like micro-organisms, multiply indefinitely in the surrounding medium.

Interesting, also, is the work of Ebeling,¹⁷ who found that connective tissue can be kept in a condition of active growth outside the organism for more than eleven months, that its mass increases considerably, and that its power of proliferation after such a long period is more active than at the beginning of its life *in vitro*.

Truly phenomenal has been the progress made in the further development of our knowledge of syphilis. The introduction of the newer methods for the isolation and cultivation of the *Spirochaeta pallida* has led to renewed activity in the study of this disease, especially its neurologic aspects. The great discovery of the year was made by Noguchi¹⁸ when he detected the presence of *S. pallida* in the brain from cases of dementia paralytica. Its presence in nervous tissue had already been known, for, according to Henderson,¹⁹ Strasman found it in 1910 for the first time in the central nervous tissue of an adult with acquired syphilis. In his address²⁰ before the Association of German Scientists and Physicians in Vienna last year, Noguchi reviews his work on the demonstration of the spirochete of syphilis in the brains of paretics, and mentions its confirmation by Marineseo and Minea, Förster and Towaszcwski, and Marie, Levaditi and Bankowski. These three last-named investigators also studied by the dark-field method the brain from six cases of progressive paralysis terminating in convulsions, and in that way were able to demonstrate the spirochetes in all. Mott,²¹ in England, has also found spirochetes in the

brains of paralytics, and Wile,²² in this country, has demonstrated the *S. pallida* in the brain substance of living paretics. Versé,²³ of Leipsic, has also found the spirochetes in cases of tabes. These significant demonstrations teach us very emphatically that the so-called parasyphilis or metasyphilis is etiologically true syphilis; in other words, that the parasyphilitic diseases are really quite as much manifestations of actual syphilitic infection as the classical primary, secondary or tertiary manifestations are. It is perfectly obvious that our classification of these diseases will now have to be completely revised. Mott²¹ suggests that the term "parenchymatous syphilis" replace the now obsolete term "parasyphilis."

Another phase of syphilis that has been worked up and successfully developed to some extent is the transmission of the disease experimentally to animals. Here, also, Noguchi's work stands out most prominently. In July he announced²⁴ that by inoculating rabbits intratesticularly with emulsions prepared from fresh brain tissue of paretics he succeeded in reproducing in the testes of these animals typical syphilitic scleroses containing *Treponema pallida*. Nichols and Hough, employing similar methods, reported²⁵ at the same time that they had produced a doubtful lesion of the rabbit's testicle and a "definite interstitial keratitis, identical with that which is known to be due to *S. pallida* in experimental syphilis in the rabbit." This was followed by the work of Graves,²⁶ who showed that the specific testicular lesions can be produced in the rabbit by the virus of syphilis obtained directly from the blood of cases of paresis and taboparesis. Levaditi²⁷ reports a similar successful inoculation with the blood of a general paralytic. Then appeared the experimental studies of Uhlenhuth and Mulzer²⁸ on the transmission of the disease to rabbits in which new and further confirmatory results were contributed. With the blood of individuals manifesting tertiary lesions, these observers obtained positive testicular inoculations, but only rarely; on the other hand, with the blood of individuals with malignant syphilis, they could produce testicular syphilomata containing spirochetes in almost every instance. Positive inoculations were

22. Wile: Jour. Am. Med. Assn., September, p. 866.

23. Versé: München. med. Wchnschr., vol. xlv.

24. Noguchi: Jour. Am. Med. Assn., July, p. 85.

25. Nichols and Hough: Ibid., p. 120.

26. Graves: Ibid., October, p. 1504.

27. Levaditi and Danilescu: Paris Letter, Jour. Am. Med. Assn., December, 2170.

28. Uhlenhuth and Mulzer: Berl. klin. Wchnschr., November, p. 2031.

16. Carrel: Ibid., September, 287.

17. Ebeling: Ibid., March, p. 273.

18. Noguchi: Ibid., February, p. 232.

19. Henderson: Am. Jour. Insan., October, p. 281.

20. Noguchi: Berl. klin. Wchnschr., October, p. 1884.

21. Mott: Lancet, November, p. 1367.

obtained with the spermatozoa from an individual with primary syphilis, and with the milk of a symptomless mother of an 8-day-old child showing severe congenital syphilis. With the spinal fluid of two fresh cases of syphilis they also obtained positive inoculations, and the brain emulsion of a recent paretic also produced in rabbits testicular syphilomata containing spirochetes.

From these significant results the obvious practical conclusions are drawn: that the use of rabbits in the study of syphilis may furnish very valuable information; that in the present state of our knowledge it may serve as a very important—if not the most important—link in the chain of evidence as to the presence of the syphilitic virus; and that, therefore, this experimental method as an aid to diagnosis should be more frequently used.

Noguchi's observations²⁰ on the experimental transmission of the disease to rabbits brought out additional significant results. He noted that there is a marked difference in the sequence of events following inoculation of rabbits with emulsions of fresh paretic brain from that which follows similar inoculation with material from chancres or secondary lesions. In the latter instance the experimental lesions appear on the average in from four to six weeks; in the former, however, typical specific nodules appear in the testes and skin of the scrotum in from ninety-seven to 102 days. In the transmission of the second generation of this same strain, it also took about 3 months for the lesions to appear. Thus has it been shown that while the spirochetes present in the brain in individuals with dementia paralytica are infectious and are capable of reproducing the disease, yet their virulence for rabbits is relatively weak.

Noguchi also discovered²⁰ that although the central nervous system of monkeys and rabbits seems to be highly refractory to luetic infection when the virus is introduced directly into the brain, it can, nevertheless, be rendered susceptible to the infective action of transmitted spirochetes by previous sensitization of the animal's tissues. This is done by repeated intravenous injection of killed, as well as living, spirochetes over a period of several months. Then either a small fragment of a rabbit's testicular syphiloma, rich in spirochetes, is implanted subdurally, or an emulsion of the same tissue is injected directly into the brain matter. Within a few (three to five) months in some of these animals can be noted spasms of the extremities, marked ataxia,

with other symptoms suggestive of cerebrospinal involvement, and the Wassermann reaction which was originally negative becomes definitely positive. At autopsy lesions like those of luetic meningo-encephalitis were seen in the brains of the sensitized animals, and in one specimen well-formed spirochetes were found. These various findings observed in connection with syphilis of the central nervous system cannot be explained as yet. We are just beginning to get at some of the facts underlying the pathology of this disease. We must await further investigation and further results in this promising field of research.

Schereschewsky²⁹ called attention to his extremely simple and reliable method for obtaining spirochetes in pure culture. It consists in heating a tube full of horse-serum at 65 C. until it is no longer fluid, then pushing half-way down into this medium an aseptically excised piece of the specific lesion. The tube is then plugged tight, and kept at 37 C. for eight days. Finally, the tube is cut below the level of the piece of tissue, some of the culture medium is spread on a slide and examined for spirochetes by means of the dark-field illumination.

Before concluding this review of the subject of syphilis, mention must be made of the important publication by Winternitz³⁰ on the pathologic changes in syphilitic aortitis, and of Longcope's³¹ valuable studies which show that syphilitic aortitis is responsible for most aneurysms, and that to it are due about 75 per cent. of the cases of aortic insufficiency, many cases of dilatation of the aorta, and a certain group of cases of angina pectoris.

Much has been added to our knowledge of malignant disease. It would be impossible to review here all the important details brought out in the many well-known publications of Lambert, Rous, Murphy, Tyzzer, Weil, Levin, Nicholson and others. It is to be expected that with such men actively engaged in the study of this subject our fund of knowledge as to the nature of tumors should be extended from year to year. Attention must be called to the notable work of Fibiger.³² His studies on rats led him to the discovery of peculiar tumor formations in the stomachs of some of these animals, which, he found, were dependent on the presence of animal parasites and their ova-containing embryos. The intermediate host of these nematodes is the

29. Schereschewsky: *Deutsch. med. Wchnschr.*, July, xxix.

30. Winternitz: *Bull. Johns Hopkins Hosp.*, July, p. 212.

31. Longcope: *Arch. Int. Med.*, January, p. 15.

32. Fibiger: *Berl. klin. Wchnschr.*, February, 289.

ordinary cockroach, *Periplaneta americana* or *orientalis*. By feeding rats with these roaches, Fibiger succeeded in reproducing cancerous-like neoplasms in the stomach of some of these animals. A characteristic feature of these growths is their slowness of development. The most significant feature is that definite metastases were produced in other internal organs. This, it should be emphasized, is the first time that the successful experimental production in healthy animals of a carcinomatous tumor with spontaneous metastases has been recorded. No parasites nor ova were found in the metastatic tumors, so that the formation of these must be dependent on an ability of the epithelial cells to develop independently in other organs. The special value of this work is in the demonstration of the production under experimental conditions of a close association between an animal parasite and cellular proliferation, becoming at times definitely malignant.

The application of the principle underlying the Abderhalden test in the diagnosis of malignant disease is another new development. The idea is that just as when foreign proteins get into the blood the body reacts by elaborating a specific ferment whose function it is to disintegrate those proteins, so under the influence of certain peculiar protein substances derived from the organism itself a similar sequence of events occurs. When elements from the placenta enter the maternal blood-stream, the maternal serum acquires the power to digest placental tissue. Can it be, then, that in malignant disease when the cancer cells invade the blood-stream of the host, an analogous reaction occurs by which the serum can digest malignant tissues? Some evidence tending to prove that this phenomenon does occur has already been submitted. Among others now on record are Epstein's³³ 37 cases, Gamberoff's³⁴ 48 cases and Brockman's³⁵ 25 cases of carcinoma, all of these yielding positive tests; and Erpicum's³⁶ report of 42 cases of various tumors in which only the malignant cases—including 2 sarcomas—gave positive results. Such results, though few as yet, are rather encouraging. They seem to bear out the hope that when the technic is perfected and made simple enough to be applied generally, we may have a reliable diagnostic test to aid us in the recognition and differentiation of cancerous tumors.

The practical results obtained by Manwaring³⁷ in his studies on experimental tuberculous meningitis are of considerable importance. Thus far he has demonstrated that experimental tuberculous meningitis in dogs has been either diminished in severity or healed by repeated subdural injections of living canine leukocytes, and that in monkeys it has been favorably influenced by intrathecal injections of rabbit leukocytes. That similar injections of animal or human leukocytes in human tuberculous meningitis might prove to be of therapeutic value is certainly suggested by these results.

Our knowledge of malaria has been extended by the contribution of Rawley-Lawson,³⁸ which shows that the malarial parasites—now regarded as extracellular organisms—secure their attachment to the outside of the red blood-cells by filamentous pseudopodia thrown out for this purpose, and by the experimental study of Brown,³⁹ which shows that the malarial pigment, hematin, is an active factor in the production of the blood-picture observed clinically in malaria.

A modification of Russo's test, proposed by Neuman and Behrend,⁴⁰ and said to have "marked corroborative value" in the diagnosis of typhoid fever, must be mentioned. It can be recommended chiefly for its simplicity, because like many similar color tests it permits of too much error in its interpretation and is, moreover, not absolutely specific.

In the search for substances with which to estimate the functional capacity of internal organs, some success has been attained with phenoltetrachlorophthalein introduced in the Hopkins clinic as a means of measuring the functional capacity of the liver. The recent contributions of Rowntree,⁴¹ Whipple⁴² and their respective coworkers are very suggestive. They point out that the striking specificity displayed by the liver toward the excretion of phenoltetrachlorophthalein seems to be analogous to the specific action of the kidney toward phenolsulphonephthalein, and that just as the latter is of value in estimating renal functional capacity, so may the former be useful in determining hepatic functional capacity. The few results already obtained indicate that there is a decreased output of phenoltetrachlorophthalein in disease of the liver. However, there are still many technical diffi-

33. Epstein: Wien. klin. Wchnschr., April, xvii.

34. Gamberoff: München. med. Wchnschr., July, xxx.

35. Brockman: Lancet, November, p. 1385.

36. Erpicum: Ed., abstr. Jour. Am. Med. Assn., October, p. 1461.

37. Manwaring: Jour. Exper. Med., January, p. 1.

38. Rawley-Lawson: Ibid., March, p. 324.

39. Brown: Ibid., July, p. 96.

40. Neuman and Behrend: Arch. Int. Med., April, 456.

41. Rowntree, Hurwitz and Bloomfield: Bull. Johns Hopkins Hosp., November, p. 327.

42. Whipple, Peightal and Clark: Ibid., p. 343.

culties to be overcome before the test can become popular, and its reliability is by no means definitely ascertained as yet. Further studies will no doubt extend our knowledge of this compound and its value for this particular purpose.

Very important from the standpoint of preventive medicine is the progress made in immunology. Immunity in diphtheria has again excited universal interest. Behring's idea of vaccination as a prophylactic measure against diphtheria has led to practical results. This idea is based on the well-known principle that balanced mixtures of diphtheria toxin and antitoxin tend to produce immunity in animals, and on the suggestion first made by Theobald Smith⁴³ that by using such mixtures it might be possible to produce immunity in man. Now Behring⁴⁴ has found that the injection of such mixtures into human beings does cause, without producing any unfavorable results, the accumulation in the blood of antitoxin, often in quite large amounts, and persisting for at least several weeks. It is doubtful whether the ideal method of administration has as yet been evolved, but the practical benefit that could result from an effective prophylactic measure of that kind during an actual or threatened epidemic of diphtheria is perfectly obvious.

Eichholz⁴⁵ calls attention to the use of desiccated serum. His researches show that a suspension of desiccated serum in olive oil seems to retain its therapeutic potency unimpaired, that absorption is much slower and that there is thus practically no danger of anaphylaxis or serum sickness. In this form the serum may be useful in prophylaxis and in cases where there are reasons for fearing an anaphylactic reaction.

Another noteworthy contribution is that of Detre,⁴⁶ announcing the production of a successful curative serum for symptomatic anthrax, which, like other curative serums, is obtained by immunizing a horse with cultures of the specific bacilli.

In this review the attempt has been made to outline very briefly the more important subjects now being investigated and the progress made in them during the year. It was, of course, a rather big undertaking, for this has been an unusually busy year. It has been an extraordinary year, one that will stand out in the annals of medical history. It is, indeed, a source of real pleas-

ure to be living in an age when so much sincere interest is being taken in the scientific study of disease and so many of the mysteries of medicine are being cleared up. Let every subsequent year be as fruitful in its yield of notable contributions as this one; let as much light continue to enter into some of the dark corners of medicine, and we may hope at some time to come out of the darkness and be free, for "veritas vos liberabit!"

SOME OF THE MORE IMPORTANT CONTRIBUTIONS TO ABDOMINAL SURGERY AND GYNECOLOGY DURING 1913

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Among the important contributions to gynecology published during 1913 is that of Dr. John A. Sampson¹ on "The Influence of Myomata on the Blood-Supply of the Uterus," and particularly interesting are his observations on the physiology of menstruation. He says, "It would seem that the entire uterus contained more blood during the premenstrual period. What causes the onset of the flow? Why does it continue for a certain number of days? Why does it stop?" As a result of extensive investigations he concludes that the normal menstrual flow is entirely a venous hemorrhage from the venous plexus of the endometrium and it is only possible where there are changes in the plexus which will permit the blood to escape. Sampson offers this fact as an explanation as to why menstrual blood does not clot.

Gossett,² feeling that the Kehr incision is defective in that it does not respect the nerve fibers of the rectus muscle, has been using the Sprengel incision with gratifying results. This incision is hook-shaped, so made that the short external arm of the hook corresponds to the direction of the great oblique muscles, this muscle being cut parallel to the course of its fibers. The long arm of the hook cuts transversely the right rectus abdominis and in case of need of more room the rectus abdominis of the left side. This incision may be used at different levels according to the location of the liver. Gossett points out the ease with which the deep biliary channels may be reached by this incision.

43. Smith: Jour. Med. Research, 1907, xvi, 359.

44. Behring: Ed., abstr., Jour. Am. Med. Assn., June, pp. 1839, 1896.

45. Eichholz: München. med. Wchnschr., November, xlvi.

46. Detre: Ed., abstr., Jour. Am. Med. Assn., November, p. 1672.

1. Surgery, Gynecology and Obstetrics, February.

2. Abst. by Jour. de Chir. for Surg., Gyn. and Obst., February.

Deaver³ thus summarizes the indications for operation for diseases of the biliary tract:

1. More than one attack of true biliary colic.
2. Symptoms of upper abdominal adhesions and chronic biliary insufficiency.
3. Hydrops of the gall-bladder.
4. Obstruction of the common duct.
5. Occurrence of acute infections complicating previously existing biliary disease.
6. Evidence of pancreatic disease, acute, sub-acute or chronic.

Dr. Joseph Rilus Eastman, in articles published in *Surgery, Gynecology and Obstetrics*, March, 1913, and *The Journal of the American Medical Association*, Aug. 30, 1913, reported his researches concerning the nature and origin of pericolic membranes. Eastman apparently established a relationship between Lane's so-called ileopelvic band and a fairly constant fetal fold which passes from the mesentery of the terminal ileum to the genital gland. He has called attention to the similarity of the parietocolic fold of Jonnesco and what is commonly called "Jackson's membrane"; likewise a striking similarity between a shirt-pocket-like fold covering the caput coli and the appendix, and the fold of Treves, both occupying the same anatomical site and having the same anatomical boundaries. The appendix is frequently shelled out of this fold in operations for supposed appendicitis. He has produced experimentally in rabbits, by inducing a plastic peritonitis, membranous adhesions, as described by Gerster, Pilcher, Oberlin, Lenormont, etc.

In a paper read before the Southern Surgical and Gynecological Society, McClannan, discussing "Intestinal Obstruction," divides the operations necessary for the relief of this condition into three classes, the procedure to be chosen depending on the conditions met. The procedures are: 1. Relief of the obstruction. 2. Excision of the intestine. 3. Enterostomy. The results of any operation for obstruction will depend largely on the stage of the disease in which it is done and conditions found and only on such a basis can definite ideas be formed as to its efficiency. Of thirty-four patients treated in the first stage all recovered, twelve being relieved by enemas and purgatives, while twenty-two were operated on.

In the second stage sixty-six were operated on with fifty-five recoveries and eleven deaths, due to a second operation or some complication developing later than one week after the first operation.

In the third stage, out of eighty-two patients operated on, fifty-two died.

In the discussion Brown laid stress on the importance of draining the loop of intestine above the point of obstruction.

Stone advocated the use of eserine and enemas, stating that when these two agents were used he had never found a purgative necessary nor had he ever found a purgative necessary where the conditions were not most formidable. Hall had found a number of cases in which the use of eserine in doses larger than a fortieth of a grain had been followed by depression. Winston said that eserine could only do good in those cases in which the bowel was not mechanically obstructed.

Polak⁴ writes on "A Further Study of the End-Results of the Conserved Ovary," basing his paper on 229 personal cases. He urges a better understanding of the living pathology of the ovary and its supports, feeling that the lack of this knowledge is responsible for failures in many so-called conservative operations on the ovaries. He concludes as follows: 1. Only healthy ovaries should be conserved. 2. The right ovary when conserved is less prone to subsequent inflammatory changes than the left. 3. All retained ovaries or parts of ovaries should be placed in such a position that their circulation is not interfered with. 4. Resection gives the best results when its application is limited to large monocytes, retention cysts, fibroids and dermoids. 5. The multiple cystic ovary should not be resected. Leave it alone or take it out. 6. A resection should be extensive. The suture line should just be approximated, not constricted and covered with a reflexion of peritoneum.

Shauta⁵ declines the conservative vaginal or abdominal enucleation of myomata because of the danger of recurrence (14 per cent.) as well as the greater operative danger and the negative results as to subsequent pregnancy. Supravaginal amputation is rather to be commended than total extirpation, yet he acknowledges and emphasizes the danger of malignancy in the stump. The author lays stress on the importance of recent research as regards malignant (sarcomatous) degeneration of fibroids, also pointing out the frequent combination of myoma and corpus carcinoma (10 per cent.). The so-called benign myoma is viewed very sceptically.

Shauta regards the Roentgen ray in these cases as productive of a bloodless castration, a

4. Jour. Am. Med. Assn., lxx.

3. New York State Med. Jour., abstracted by Surg., Gyn. and Obst., February.

5. The Modern Treatment of Myoma, Wien. Med. Wehnschr., abstr. by Surg., Gyn. and Obst.

procedure free from danger and causing less decomposition resorption, probably because the generative function of the ovary only is destroyed, the interstitial portion producing the inner secretion being conserved.

In separate articles Parker and Lund⁶ discuss "Tuberculous Mesenteric Glands Simulating Appendicitis." The diseased glands may be found anywhere in the mesentery but most frequently in the glands draining the ileocecal coil. Diagnosis is difficult as the disease follows no definite symptom complex. There may or may not be a palpable tumor. The tenderness in this condition is generally nearer the median line than in appendicitis, muscular rigidity is not so marked nor does the patient seem so ill as one who has appendicitis with the same temperature. The treatment is removal, care being taken not to infect the peritoneum.

Duhrssen and Offergeld⁷ advocate the use of synthetic hydrastinin hydrochloricum in hemorrhages due to diseases of the adnexa. The preparation has the same indications for use as the fluid extract of *hydrastis canadensis*. It is used in tablets containing about $\frac{1}{3}$ grain four times a day or in liquid form in doses of about twenty drops. The drug is said to exert a much more powerful effect on the uterine musculature and a stronger vasoconstrictor effect on the peripheral vessels than does either the fluid extract *hydrastis canadensis* or hydrastinin. Offergeld had good results in climacteric and preclimacteric hemorrhages, in stagnation hemorrhage of a retroflexed uterus, in anemic hemorrhage, in hemorrhagic diathesis, tuberculosis, nephritis and virginal uterus.

Crile⁸ says, "The relation between the blood-pressure and the prognosis in abdominal operations is based on two extremes, viz., an extremely low blood-pressure and an extremely high blood-pressure. Provided the heart is normal we can now control the low pressure phase by transfusion of blood, by mechanical means, or by saline solution. The high blood-pressure is far more difficult to control because it is difficult to control the factors that produce this condition. If there is cardiovascular disease due to infection or to lues, nitroglycerin may have little effect, though there is a type of cardiovascular disease that is controlled by nitroglycerin. It is not wise to reduce the blood-pressure by bleeding, and aside

from nitroglycerin and hygienic measures there are no other remedies. Whether the blood-pressure be abnormally high or abnormally low the patient is more likely to have complications, such as thromboses, emboli, pneumonia, nephritis, indeed, the abnormal blood-pressure plays into the hands of the usual dangers and complications of abdominal operations.

Could the operation be so performed that the nervous system would remain uninjured, the blood-pressure unaltered, the maximum degree of safety would be reached. The author found this could be done on the principle of anoci-association."

Connell⁹ draws the following conclusions: 1. Anomalous development offers a rational explanation for these conditions. 2. Coincident or resultant inflammation may cause confusion. 3. Describing the embryological changes in the ileocecal region under the single term "rotation" likewise causes confusion. 4. Such changes are: migration, rotation and fixation, one or more of which may be imperfect. 5. The Jackson or pericolic membrane may be due to excessive rotation, delayed migration or early or anomalous fixation. 6. The Lane kink may be due to excessive or anomalous fixation. 7. The cecum mobile is due to an absence of fixation.

Frank,¹⁰ after having classified the conditions involved as follows: (1) abortion, induced and spontaneous; (2) post-abortion conditions; (3) post-partum conditions; (4) ectopic gestation; (5) parametritis and adnexitis; says, "Curettage in Class 1 is hardly ever necessary unless profuse hemorrhages, resisting usual treatment, demand active interference. In the long run more patients will be saved by noninterference than by even the lightest curetting. Post-abortion bleedings usually disappear under nonoperative treatment. In post-partum conditions also curettage is never necessary. If placental tissues are retained they should be removed manually. Whenever the slightest shadow of doubt exists in ectopic gestation it becomes imperative to avoid curetting and to await further developments. In adnexitis and parametritis with menorrhagia curetting is never advisable unless it is immediately followed by further operative work on the adnexa. Endometritis is rarely benefited by curettage. It certainly does not improve leukorrhea, which is usually of cervical

6. Boston Med. and Surg. Jour., cixvii, 915-918.

7. Berl. klin. Wchsch., 13 L.

8. Am. Gynec. Assn., 1913, May, abstr. by Surg., Gyn. and Obst.

9. Lane's Kink, Jackson's Membrane and Caecum Mobile, Surg., Gyn. and Obst., April, 1913.

10. Contra-indications to Curetting, New York Med. Jour., 1913, xcvi, 808; abstr. by Surg., Gyn. and Obst.

origin. Sterility also would not have been relieved by a scraping if the dilatation of the cervical canal had not preceded it. Ovarian disturbances play a more important rôle in female sterility than suspected abnormal conditions of the uterus."

Dr. W. D. Gatch¹¹ reported his researches on the dangers and prevention of severe cardiac strain during anesthesia. These experiments were made on dogs which were anesthetized with ether, without a preliminary dose of morphin. A record of the respiration and blood-pressure was taken while the animal was in the horizontal position and repeated after the dog had been placed in a 45 degree Trendelenburg position. One of the conclusions of the author is that the Trendelenburg position is harmless for patients with normal hearts, provided that the respiration is unobstructed.

PROGRESS OF OPHTHALMOLOGY FOR THE YEAR 1913

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LA FAYETTE

During the past few years it is painfully apparent that ophthalmology has not kept pace with the other specialties in progress. This is undoubtedly due to two causes: First, the overcrowding of our specialty by those who are seeking an easy way of making a good living; second, our specialty has not yet attained the dignity of a major subject in the curricula of our medical colleges.

When men and women are more concerned about a living instead of a life work, science halts, progress ceases, and what is worse, retrogression begins. We are here not primarily for ourselves, but to do suffering humanity all the good we can. We are here to "spend and to be spent." When one looks over the lists of the multitude specializing ophthalmology, how few there are, comparatively, who are willing to spend time and money in investigation and original research in order that the sum total of knowledge may be increased, or who are willing to record experiences which may be of inestimable value to those who will sooner or later encounter the very same experiences, and who may need the help that such record will bring.

We are not pessimistic. We desire to direct attention to the apparent lack of interest that is

manifest in so many quarters to-day in ophthalmology. Indiana is no exception.

Some plead the lack of laboratory facilities, such as are found in the schools of learning. But be it remembered, that some of the best laboratory work has been done in physicians' offices far removed from seats of learning. In fact, the well-equipped office of the ophthalmologist is a veritable laboratory for research work. If one will step into the laboratory of psychology of any of our well-equipped universities he will there find the apparatus used by us in our work. There it is used in investigation of mind, in its relation to the eye. By way of digression, let me say that right here is a field for research that has hardly been touched by members of our specialty. We are so accustomed to looking into eyes that we fail to consider what looking out of eyes means to us all.

The crowding of our specialty by those who seek an easy living has, according to Würdemann, reduced the average income of the ophthalmologists so that a man with an income of \$10,000 per year from practice is rather rare. To keep pace with the best, in books and apparatus, to attend the various meetings of societies to support and educate a family, the ophthalmologist must have needs of a good income. Hence it has become necessary to reduce the number of ophthalmologists by making requirements so stiff that fewer will in the future be willing to attempt ophthalmology. Earnest souls are considering this subject and the first steps are being taken.

At the last commencement of the University of Colorado, the degree of "doctor of ophthalmology" was conferred on three men who had pursued successfully the courses leading to that degree. This is a landmark in the progress of ophthalmology, and may the ideas of Dr. Edward Jackson spread broadcast over this country. Thus will the six weeks' course at some postgraduate medical school be tabooed as a prerequisite for the practice of so important a specialty. Similar steps have been taken in Great Britain.

When ophthalmology shall have become a "major" in the undergraduate curriculum, the work of the ophthalmologist will be better appreciated by the profession in general. The trouble is that the average physician received too little of our subject to acquire respect for it. Hence many physicians will send their patients to the optician to be fitted for glasses to cure a headache, or will indifferently treat them, until they learn from a friend that there is scientific relief.

¹¹ Jour. Am. Med. Assn., April 26, 1913.

and off they go to the ophthalmologist, and the general men have lost many patients whom they should have retained. In other words, we strive for a better understanding between the internist and the oculist.

Notwithstanding all this, ophthalmology has made progress during the past year, and right here in Indiana, as the last meeting of the Section of Ophthalmology and Oto-Laryngology of the Indiana State Medical Association will attest. The papers of Newcomb, Shanklin, Potter and Morrison are the equal of any presented before special societies.

The world over shows progress also. Thirty-eight journals devoted exclusively to ophthalmology have poured out in the neighborhood of 3,000 articles on every phase of the subject. The makers of new text-books are numerous. Old ones are appearing in new editions. Numerous are the new instruments presented, some unfortunately minor modifications of old and much-used ones, but modified sufficiently to give the modifier's name to something that he does not possess ability to invent.

The subject most discussed last year was

GLAUCOMA

This is due to the invention of the tonometer of Schiotz and the newer operations for securing a permanent filtering cicatrix, the ideal striven for by Von Graefe, but which he did not realize. The operation now holding the attention of the profession is that of Elliot of the Indian Medical Service. He trephines the sclera at the root of the iris. He himself to date has performed over 900 such operations with marked success. Elliot visited this country last fall and appeared before several of the societies and clinics and stimulated a vast amount of interest in his operation.

The latest operation for glaucoma is that of David Priestly Smith.¹ "After anesthetizing the eye, the conjunctiva is picked up some 6 mm. from the cornea and incised in a curved line concentric with the corneal margin. The flap is dissected up with scissors until the corneal margin is reached. The cornea is split. The vitreous is tapped with a Graefe knife, 6 mm. behind the cornea above the upper margin of the external rectus. The conjunctival flap is again picked up and the point of a broad keratome entered immediately outside the margin of the cornea, the flap laid back on the keratome and the latter pushed into the anterior chamber until the inci-

sion is about 5 mm. long. Next a small triangular piece is snipped out of the corneal lip of the incision by two scissors cuts, converging to meet short of the line of reflection. Iridectomy is performed and the flap replaced."

PHYSIOLOGY

The human eye² can just perceive the light of an ordinary candle at the distance of a mile and a half, which equals at that distance seventeen one hundred millionths of a candle power. Yet it can be measured with a reasonable degree of accuracy by means of a photo-electric apparatus, consisting of a ring of platinum in a highly exhausted bulb filled with argon gas. Below the platinum ring the wall of the bulb is coated with a thin layer of metallic potassium. These are connected to a battery of 160 volts tension. A ray of light falling on the layer of potassium causes a discharge to take place, and the galvanometer placed in the circuit readily shows the deflection due to the photo-electric effect.

HEREDITY

Libby³ gives the clearest exposition on "Heredity in Relation to Diseases of the Eye" that has yet appeared.

CRYSTALLINE LENS

Würdemann⁴ reports a very interesting case of spontaneous dislocation of the lens in which the stretched zonular fibers are quite visible and very marked.

Stahl⁵ finds remnants of persistent pupillary membranes (fetal) much more frequently than other observers. Out of 1,600 eyes examined in Professor Haab's clinic in Zurich, he found 63.25 per cent. possessed of this anomaly.

Holloway⁶ reports seven cases of "Unusual Types of Punctate Cataract." The disease has been rarely observed, and Holloway insists it is because our examination methods are faulty. Oblique focal illumination is necessary for the diagnosis.

Ewing⁷ describes a method of extracting cataract in its capsule, employing forceps of his own invention.

Dudley⁸ reports a case of absorption of the lens nucleus in a patient 65 years of age.

1. Ophth. Rev., March.

2. Scientific American Supplement, April 19.

3. Ophthalmology, January.

4. Ophthalmology, October.

5. Klin. Monatsbl. f. Augenh., April.

6. Ophth. Rec., August.

7. Am. Jour. Ophth., St. Louis.

8. Ophthalmology, July.

CORNEA

Keratoconus is always an interesting subject for discussion, especially from the operative standpoint. Professor Grunert of Bremen⁹ has treated eleven cases in the last five years. He employs a modification of Professor Elschning's method: "Who makes a streak with the galvanocautery from the limbus to the apex of the cone." Grunert uses an electrode with a flat tip, beginning at the upper limbus he cauterizes for two or three millimeters, the burn reaching to the parenchyma. Then with the finest wire tip the line is extended into an equilateral triangle, its apex being continued as a fine line to the center of the cone. In two days the slough is scraped off and the cornea split along the middle of the burned line from the center to the limbus. The center is covered with a Kuhnt conjunctival flap.

Weeks¹⁰ reports five cases of keratoconus operated on by making an iridectomy first. After the iridectomy wound has healed the cone is cauterized.

Bassilino¹¹ arrives at the following conclusions: 1. The resistance of the cornea to epitheliomatous invasion is greater than any other tissue. 2. This is principally due to Bowman's membrane. 3. The membrane may prevent further penetration of pathologic process. 4. When the penetration does take place dissolution of the membrane occurs. In these cases microscopic examination shows plasma cells and new formation of connective tissue and vessels.

THE PITUITARY BODY

This organ has attracted much attention during the past year. For instance, in the Proceedings of the Royal Society of Medicine for the past year, ninety-four pages are devoted to a most complete symposium on this subject. The essayists are such well-known writers as Lawford, Harman, Parsons, Doyne, Eason, Holmes, Thompson, Tinney, Poynton, Stewart, Wilson, Brewerton, Rustin, Wilcox, Collier, Battin and Williams.

TUMORS

Benzinger¹² reaches the following conclusions as to the treatment of choked disk, especially in tumors of the brain: 1. Bilateral choked disk is an unconditional indication for decompression

operation even though the damage to the optic nerves is so slight that the vision is yet normal. 2. The greater the damage to the optic nerves by the advanced pressure the poorer are the prospects for operation. 3. Since in brain tumors the causes of choked disk cannot be removed, a permanent enlargement of the space for brain expansion is necessary. 4. Hydrops of the ventricles often accompanies solid tumors. Hence simple trephining will suffice in but a few cases. 5. If localization is impossible the parietal region is preferable. 6. In every case the therapeutic plan depends on the ophthalmoscopic appearances of the choked disk.

Paton¹³ advocates the use of carbon dioxide snow for the removal of rodent ulcer about the eyelids. The chief feature of his cases is the plasticity of the resultant scar.

"New Test for Cancer by Examination of the Urine for Hemo-Urochrome." Davis¹⁴ gives us the following new test: 1. Take 100 c.c. of fresh urine (no preservative if possible) and add 10 c.c. of hydrochloric acid. 2. Heat in a flask over a slow fire until ebullition begins. Allow to cool, slowly at first, after which cooling may be hastened by immersion in cold water. 3. When cold add 30 c.c. of ether, cork, tying the cork to prevent evaporation. 4. Turn the flask upside down several times during the six to eight hours to complete the test. Avoid hard shaking. In cases of pronounced cancer the ether will acquire a markedly red color in as short a time as twenty minutes, though six to eight hours may be required to complete the extraction of the hemo-urochrome.

AUTO-INTOXICATION

That auto-intoxication may produce serious eye lesions is the basis of a paper by Hilgartner.¹⁵ He reports three cases showing loss of vision. The urines showed indican. Unloading the system of the poisonous indol restored vision. Again we may add that the eyes are but a pair of organs in a body.

Browning¹⁶ emphasizes the importance of examining the urine and feces in eye diseases, for a cured pyorrhea alveolaris may not clear up a general infection due to the swallowing of the pus from the mouth. A patient may come with an irido-cyclitis and the mouth has been rendered clean. Yet the feces show the presence

9. Ophthalmology, January.

10. Arch. Ophth., September.

11. Arch. di Ottol., Part 10.

12. Ztschr. f. Augenh., January and February.

13. Ophthalmoscope, September.

14. California State Jour. Med., October.

15. Jour. Ophth. and Oto-Laryngol., June.

16. Ophth. Rev.

of streptococci, pneumococci and other bacteria the removal of which hastens the cure of the eye disease.

ACCIDENTS

Fisher¹⁷ reports a case of optic atrophy following the subcutaneous injection of a mixture of lanolin and olive oil for the removal of wrinkles. Let me add that in the majority of cases showing wrinkles in the forehead it will be found that said wrinkles are due to eye strain. Hence the ophthalmologist is to be preferred to the "beauty doctor."

Fernandez,¹⁸ as to hair dyes, concludes as follows: 1. All hair dyes in use at the present time are more or less toxic in effect or may give rise under certain circumstances, to general and local eye troubles. 2. The injurious effects are of two classes, inflammatory and toxic, although both may be present at the same time. The trouble may be only ocular in character or it may affect the general system as well as the eyes from the start. 3. The dyes that do the most harm are those containing aniline derivatives. As they are easily prepared, these are the dyes most generally used. 4. Fortunately, as the aniline derivatives are powerful colorants, a smaller quantity of the dye is necessary to produce the desired results and there is therefore less danger to the eyes and health.

"Ocular Accidents in Children." Terrien and Dantrelle¹⁹ have collated 210 cases of such injuries out of 23,000 patients seen in six years. In children under 2, the accidents are due mostly to falling in the fire, frying fat spattering in the eyes, and to falls. Between 2 and 4 the accidents are due mostly to awkward movements and to falls while holding knives and forks in the hands. To the age of 4 the sex is equal. From 4 to 6 three boys are injured to one girl. Above 6 the accidents are due to the dangerous pastimes indulged in by boys and to pocket-knives and quarrels.

GOLF BALLS

Crigler²⁰ reports another golf ball accident. A boy attempted to dissect a golf ball, when the caustic content of its core was thrown into his eye, causing a severe burn of the conjunctiva and cornea.

Lowell²¹ reports six such accidents. Chemical examination of the contents of one of the cores

was made. The composition was a mixture of barium sulphate, soap and free alkali.

ERRORS OF REFRACTION

Newcomb²² gives a very exhaustive and illuminating article on headaches in relation to eye-strain. The article must be read in its entirety as no abstract can possibly do it justice.

LaFever,²³ on "Myopia, Etiology and Optical Management," reaches the following conclusions: 1. The myopic eye must be looked on as a sick eye. Its chief ailment is poor nutrition of the vascular coats. 3. This induces atrophy, thinning and reduced support for the sclera. 4. The lessened resistance in the wall of the eye induces more myopia, establishing a vicious circle in which myopia produces atrophy and atrophy produces more myopia. 5. The best optical management of optical myopia is full correction constantly worn, because it increases the nutrition and strengthens the wall of the eye. 6. Near use of the eye is not a cause of myopia and should be encouraged as an aid to treatment except where there is a recent destructive lesion, as macular hemorrhage, rupture of the retina, detachment, etc.

Harbridge²⁴ writes on "Concomitant Convergent Squint: Value of Corrective Glasses in Its Treatment." He urges what is now common practice among ophthalmologists—the earliest possible correction of the refractive error by glasses. Atropia may be needed in the fixing eye to force the squinting eye into action. It is remarkable how even babies will take to glasses thus. Eighty-five per cent. of cases treated thus before they reach the age of 6 are capable of cures without operations for squint.

Zentmyer²⁵ gives a sociologic essay on the errors of refraction and concludes briefly as follows: 1. As affections of the eye, that may lead to incurable blindness and consequently an economic loss of vision and possible tax on the community, may have their origin in or be aggravated by errors of refraction, such errors, when producing symptoms should at once be corrected. 2. That it would aid in the efficiency of labor and prove an economic saving for corporations and others with large office forces to require of applicants for employment an examination of the eyes by a competent ophthalmologist and where errors of refraction are present of a degree

17. *Ophth. Rec.*, January.

18. *Arch. Ophth.*, January.

19. *Arch. d'opht.*, xxxiii.

20. *Jour. Am. Med. Assn.*, April 26.

21. *Jour. Am. Med. Assn.*, December 27

22. *Ophthalmic Record*, May.

23. *Ophthalmology*, October.

24. *N. Y. Medical Journal*, January 25.

25. *Annals of Ophthalmology*, June.

which in his judgment requires correction, to insist on their correction. 3. The examination of the eyes of schoolchildren should be compulsory by law, and that such examination be made by a competent ophthalmologist and him only. 4. That it seems possible that certain types of epilepsy may have reflex ocular origin, therefore this question be made the subject of careful study. 5. In consequence of the adoption in many of the states and the probable final adoption in all of the states of workingmen's compensation laws, it is of the utmost importance to employers to have the eyes of their employees and applicants for positions examined by competent ophthalmologists, and where subnormal visual acuity exists, as the result of errors of refraction, to have it brought to normal by correction of the error. 6. That a campaign of education of the public to the dangers of entrusting the examination and the treatment of defective vision to those whose only qualification is their assurance and whose aim is the successful accomplishment of a business transaction should be inaugurated.

THERAPY

"Guaiacol Diaphoresis." Wood and Anderson²⁶ dilate on the value of diaphoresis in ophthalmology: an old-fashioned remedy that possesses merit that deserves attention. They use guaiacol as follows: 1. The patient is prepared over night by administration of an aperient and the temperature recorded on a four-hourly chart. A daily evacuation of the bowels should be maintained. 2. In the morning a very hot bath is given and the patient put to bed between blankets and with hot water bottles. 3. Two drams of a guaiacol ointment (guaiacol and olive oil, equal parts) are applied over the abdomen (smear on) on an area 6 inches square, covered with oiled silk and left in position for four hours. A glass of hot lemonade or peppermint water may be given at the beginning of diaphoresis. 4. When diaphoresis is complete, the patient is rubbed down and settled as for the night.

Whitman²⁷ on "Experiments on the Excretion of Salicylic Acid in the Ocular Humors," thus concludes: 1. Salicylic acid is excreted in very weak solutions four hours after ingestion of phenyl-salicylate following paracentesis of the cornea. 2. Salicylic acid is excreted in very weak solution six hours after ingestion of acetyl-paramidophenol salicylate following paracentesis of the cornea. 3. Salicylic acid is excreted

markedly four hours after ingestion of the hexamethylenamin salicylate. Formaldehyd is also excreted. From these experiments it would seem that the last is preferable to the salicylate of sodium in massive doses as proposed by Gifford in 1899.

RELATION OF THE EYE TO THE NOSE

Hajek²⁸ points out that many cases of retrobulbar neuritis are associated with lesions in the nasal cavity and its adnexa. He points out, however, that lues and multiple sclerosis are not to be overlooked as causative factors.

Weeks,²⁹ in an article on "Some Cases Illustrating Ocular Disturbances Due to Diseases of the Nose and Accessory Sinuses," reports ten cases in which a wide range of ocular symptoms was manifested, due to abnormal conditions affecting the nose and accessory sinuses, the removal of which causes produced results unattainable by other means alone.

PARINAUD'S CONJUNCTIVITIS

Verhoeff (*Arch. of Ophth.*, July) announces the discovery of a leptothrix as its probable cause.

INSTRUMENTS AND DEVICES

The year has been as prolific in new instruments or modifications of old ones as any of its predecessors.

In order to enable presbyopes to use the rifle well, Sehanz of Dresden³⁰ has perfected a sight for firearms. It is a system of mirrors so that the presbyope sees both sights as well as the one possessed of his accommodation. For use at night the sights can be illuminated by a small electric lamp energized by a small pocket battery.

Elliott³¹ praises the self-lighted ophthalmoscope. The great advantage is that a beam of light may be directed to any portion of the fundus to the exclusion of the rest. Another advantage it possesses is that it can be used with the patient in bed.

PREPARATIONS FOR SPECIAL PRACTICE

Jackson³² reports the results of his investigation on this subject. He sent three hundred letters to ophthalmologists in various parts of the country who are in active practice. The majority started with general practice, giving more and more time to ophthalmology as time

28. *Wien. Klin. Rundschau.*

29. *Journal of Ophthalmology and Oto-Laryngology*, September.

30. *Ophthalmology*, October.

31. *Ophthalmoscope*, March.

32. *Ophthalmic Record*, September.

26. *Ophthalmoscope*, June.

27. *Ophthalmoscope*, February.

went on. One-half did a part or whole of their postgraduate work in Europe. One hundred and sixteen worked as assistants in the private practices of ophthalmologists. Sixty-three served as interns in ophthalmic hospitals. One hundred and sixty-eight served as assistants in eye clinics.

PROFESSOR HIRSCHBERG

On September 18 Professor Hirschberg celebrated his seventieth birthday anniversary. To commemorate the event and to do honor to this indefatigable worker in ophthalmology the "Centralblatt für praktische Augenheilkunde" published a "fest nummer" containing fourteen articles written by his friends and former pupils. Thus the custom of those deserving honor is kept up abroad. May the day hasten when in this busy country of ours we will pause to do likewise to American ophthalmologists who are as deserving of honor.

THE HERMAN KNAPP MEMORIAL EYE HOSPITAL

During the past year, at the southwest corner of Fifty-Seventh Street and Tenth Avenue, New York City, was opened the above named hospital. It is the successor of the New York Ophthalmic and Aural Institute, founded by Herman Knapp at 44 and 46 East Twelfth Street. Thus perpetual honor has been done the memory of one who, beloved by all, did so much for ophthalmology in general.

IN MEMORIAM

The Grim Reaper has been busy this past year thinning our ranks and many of our confreres have passed over where "eye sees to eye and face to face." In our own state James Livingston Thompson is no more. Neither is R. Parks White of Fort Wayne. In the adjoining state of Ohio, D. W. Greene, the high priest of the Smith Indian cataract operation for the extraction of cataract in its capsule, has joined the silent majority. Abroad the deaths recorded embrace such well-known names as of Ernest Motais of Paris, Henry Swanzy of Dublin and Edward Nettleship of London.

With this all too brief retrospect let us pause in conclusion to direct attention to a most important event to take place in St. Petersburg, Russia, next August 10 to 15 in the assembling of the International Ophthalmological Congress. Those who have been privileged to attend them in the past bear witness that attendance on such gatherings is productive of much good and of lasting benefit.

SOME INTERESTING PAPERS IN OTOLARYNGOLOGY FOR 1913

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Most otolaryngologists take one or all of the four review journals, namely, Semon's *Internationales Centralblatt für Laryngologie, Rhinologie, u. s. w.*, *Internationales Zentralblatt für Ohrenheilkunde und Rhino-Laryngologie*, Blau's *Bericht über die neueren Leistungen in der Ohrenheilkunde* and *The Index of Oto-Laryngology*.

In 1911, out of a total of fifteen countries, the United States lead with 652 papers in rhinolaryngology, while Germany was second with 585 papers. Although we lead in quantity our quality is very inferior to Germany. The mass of literature is so large that only a few of the papers can be mentioned. Sluder has written an important paper on "Etiology, Diagnosis, Prognosis and Treatment of Sphenopalatine Ganglion Neuralgia"; Onodi¹ on "Rhinological and Otolological Lesions of the Oculomotorius, Trochlearis, Trigemini and Abducens"; also a book on the relation of the lachrymal organs to the nasal and accessory sinuses, sixty-six pages.

V. Nicolai, in a paper on the development of the nasal accessory sinuses, says the maxillary sinus begins in the fourth month of intra-uterine life and enlarges in an anterior and posterior direction in the second to fourth years. In the fifth to seventh years it reaches the floor of the orbit. The frontal sinus begins its development in the second year. The sphenoid sinus begins at the end of the second year, grows slowly and between the twelfth to fourteenth year reaches the neighborhood of the sella turcica. The ethmoid cells are visible after a year.

Hörter writes on "Comparative Investigation of the Acuity of Hearing of the Blind and Those with Sight." *Beiträge Passow's*, Vol. 6, Aug., 1913, says the blind have no sharper hearing than those with sight and acquire no greater sharpness of hearing with the duration of blindness. A method must be found by which the blind can learn to use the hearing as an orienting sense. When the blind person approaches an obstacle the perception of the modified noise of

1. Ztschr. f. Ohrenh., 69. Bd. H. 1.

his own step directs his attention so that he is prepared for the sensation of touch.

Julius Veis² calls attention to the relation of whispered speech and conversational speech when whispered speech is heard under one meter. In otosclerosis and many cases after middle ear suppuration conversation is not heard much further than whispered voice, while in nerve deafness and exudative middle ear processes conversational voice is heard much better than the whispered voice. Karl Beck³ writes an interesting paper on "Experimental Investigations on the Influence of Bacterial Toxins and Poisons on the Organ of Hearing"; Seherer and Kutvirt of Prag on "Relation of Middle Ear Inflammation to the Diseases of Early Childhood." Observation extended three and three-quarters years; 4,450 infants investigated; 277, or 4.87 per cent. had middle ear disease: rhinitis middle ear disease in 7.9 per cent.; pharyngitis middle ear disease in 12.2 per cent.; angina middle ear disease in 25 per cent.; bronchitis middle ear disease in 9.9 per cent.; pneumonia middle ear disease in 6.66 per cent. The farther away the process is from the eustachian tube the rarer the middle ear inflammation.

Franke, "On the Function of the Auricle" (*Passow-Schaefer Beiträge*, Vol. 6), says that the ear is not an absolutely worthless rudiment physiologically. Sound waves are directed best to the drum membrane when the auricle is at an angle of 40 to 45 degrees from the head. The hairs on the tragus prevent wind, dust and germs from entering the canal. Grossman in *Passow-Schaefer's Beiträge* writes of a case of acute purulent otitis media with complications in which necropsy showed amyloid degeneration of the spleen, kidneys and liver and suggests that cases of ear suppuration be examined for amyloid degeneration. Lüdens, in *Deutsche medizinische Wochenschrift*, differentiates syphilitic middle ear inflammation from otitis media of syphilitics. He reports five cases of syphilitic middle ear inflammation. Picture of acute otitis media. Hearing greatly lowered; at times complete deafness. Lack of pain not characteristic. On incision of drum the knife meets a peculiar resistance and no secretion of pus follows. This fact with the history gives the diagnosis.

Hamm⁴ uses the othotherm producing a high frequency current. Improvement is said to fol-

low in cases of nonsuppurative middle ear catarrh and in cases of defective hearing following middle ear suppuration. Some cases of otosclerosis improved. Manasse⁵ gives the microscopic findings in sudden deafness from scarlet fever otitis and the recognition of otitis interna serosa. Alfred Zimmerman writes on the occurrence and importance of transitory glycosuria in the course of suppurative otitis media. The occurrence of glycosuria in an operative case means a less favorable prognosis. In cases where before and after the operation glycosuria occurs give large doses of sodium bicarbonate. Walb⁶ of Bonn tells of improving the hearing in cases where the stapes is exposed by direct application of Lucae's pressure probe and suggests its possible application through an exploratory incision where the usual methods are without result. Conrad Stein says that tinnitus may be caused reflexly from the nasal mucosa through irritation of the branches of the trigeminus in the nasal cavity. Changes in blood-pressure and disturbance of the heart action caused by the irritation of the nasal mucosa may cause tinnitus reflexly.

W. H. Haskin,⁷ on the correction of nasal obstruction by orthodontists, calls attention to the importance of removing adenoids about the third year of life when the upper maxillary bone is developing so that each child will develop a normal face.

Klopfer⁸ transplants fat from the gluteal region to the frontal sinus or other bony cavity to prevent deformity. Perez considers ozena as an infectious disease and the Perez bacillus produces ozena and atrophy in rabbits. In fourteen cases he found Perez bacillus in eight—57 per cent. According to Perez ozena is an infectious disease in the true sense of the word. Atrophy is the end stage of the disease and chronic rhinitis is the beginning (Hungarian Section of the International Committee for Ozena Investigation).

Louis Jacobi⁹ uses scarlet red in mucilago-acaciae for atrophic rhinitis. Bonnier¹⁰ applies galvano cautery to nasal mucosa of the external wall of the nose a little above the head of the inferior turbinate and cites thirty-five cases in which he cured incontinence of urine in patients of ages ranging from 3 to 55 years. Goldstein¹¹

2. Arch. f. Ohrenh., 90, Bd. 3H.

3. Ztschr. f. Ohrenh., 68, Bd. 1 u. 2 H.

4. Deutsch. med. Wochenschr., July 10, 1913.

5. Arch. f. Ohrenh. Bd. 89.

6. Ztschr. f. Ohrenh., 68, Bd. 4 H.

7. Arch. internat. de Laryng.

8. Bruns: Beiträge z. klin. chir. Bd. 84, H. 3.

9. New York Med. Jour., May 31, 1913.

10. Arch. internat. de Laryng., T. 35, No. 2.

11. Laryngoscope, October, 1913.

on "Horse Serum to Control Hemorrhage" uses serum therapy as a routine procedure and systematically tests the coagulating time; whenever the time exceeds seven minutes serum is injected.

Professor Citelli¹² on "Pituitrin in Operative and Spontaneous Hemorrhages of the Respiratory Tract" injects 1 c.c. one-fourth hour before operation and two, three or four hours after the operation a second injection. Operations on the lower turbinate, polypi, tonsils and uvula. Cases of epistaxis due to gumma of the septum, arteriosclerosis, uric acid diathesis and anemic cases were controlled by pituitrin injections.

Gerber¹³ uses salvarsan and neosalvarsan locally in Plaut-Vincent's angina or slight disturbances caused by spirochetes. Five to 10 per cent. watery or glycerin solutions or the powder blown on the part or the part rubbed firmly with a cotton stick dipped in glycerin and then the powder. Henke on phlegmonous inflammation of the faucial tonsils reports thirty-five cases of peritonsillitis injected with antistreptococcus serum. In twenty cases the inflammation disappeared within three days, often the pain disappeared immediately. Especially adapted in cases of peritonsillitis in hemophilia. Walter Beyer¹⁴ says that intravenous use of antitoxin serum reduces the fever more quickly but its effect on the throat is about the same. No harmful results were observed on the kidneys.

Ledermann¹⁵ reports five cases of carcinoma of the larynx in which four showed the presence of syphilis. He believes that lues predisposes for carcinoma and that every luetic affection of the mouth and larynx should be energetically treated and if the disease recurs or does not completely heal in spite of energetic treatment then a specimen should be removed to establish the character of the disease.

P. Heymann¹⁶ says a monochorditis may be of catarrhal origin. Only by careful observation of the patient can a diagnosis be assured after excluding cancer, lues and tuberculosis. Otto J. Stein¹⁷ calls attention to the great number of cases of thyroid disease which show a recurrent paralysis without laryngeal symptoms. Rethi¹⁸

illustrates a new method of taking Roentgen ray pictures of the larynx and trachea. The film, covered with waxed paper, is placed in the hypopharynx or esophagus. Rethi has treated dysphagia in laryngeal tuberculosis by an instrument bringing pressure on the superior laryngeal nerves instead of injecting with alcohol. E. Winckler,¹⁹ on "Laryngeal Tuberculosis under Pneumothorax Treatment," says that artificial pneumothorax frequently stops the cough and the sputum becomes less. Only done in severe cases of lung tuberculosis and the prognosis of the larynx is very dubious.

Ephraim of Breslau says that bronchial asthma is not a neurosis but a chronic disease of the bronchial mucous membrane, the part taken by the nervous system is secondary. Henke,²⁰ on "Endobronchial Treatment of Bronchial Asthma," treated twenty-four cases in part with the endobronchial spray of Ephraim and part by bronchoscopy. Besides using adrenalin and hypophysin, Borchard speaks favorably of asthmalysin, a combination of adrenalin and hypophysis extract. Krause used $\frac{1}{2}$ per cent. novocain spray endobronchially. Samuel Ing-lauer²¹ thinks that the suspension laryngoscopy of Kilian is a great step in the progress of laryngoscopy. Chevalier Jackson²² thinks that insufflation anesthesia is a safe procedure after seeing Elsburg. He says that the day of tracheotomy preliminary to the extirpation of nasopharyngeal fibromatas is past. Feldmann²³ tells of the importance of bronchoscopy in spasm of the glottis. Chevalier Jackson of Pittsburgh reports in his last series of 182 bronchoscopies for foreign bodies three deaths in the course of a few months—1.7 per cent. Only in one case was lower bronchoscopy made. In 182 cases he removed the foreign body 177 times, in five the small body was in the small bronchi near the periphery of the lung. Bleeding may come from the lung when the tuberculous nature is not evident by other means than the bronchoscope. Jackson found in cases of bleeding from the lungs aneurysm three times, cancer twice, lues three times and of a tuberculous nature several times.

12. Ztschr. f. L. R. und ihre Grenzgebiet.

13. München. med. Wehnschr., No. 22, 1913.

14. München. med. Wehnschr., No. 34, 1913.

15. Ztschr. f. Ohrenh., 68, Bd. 1 H.

16. Arch. internat. de laryng. T. 35 No. 1.

17. The Laryngoscope, March, 1913.

18. Ztschr. f. 4. u.s.w., April 5, 1913.

19. Ztschr. f. Laryng., Bd. 6.

20. Deutsch. med. Wehnschr., No. 32.

21. Laryngoscope.

22. Laryngoscope, Vol. 23 No. 9.

23. Ztschr. f. Ohrenh., 68, Bd. 4 H.

REVIEW OF PEDIATRIC LITERATURE OF 1913

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There is nothing startling in the English medical literature of the past year, but there is much of interest and certain new procedures have been placed on a more certain and scientific basis.

As usual, there has been a great deal written on the subject of infant-feeding. Howland¹ takes up feeding from a scientific standpoint. He says that if we can accept the evidence of the breast milk-supply, the infant needs very little increase of proteid after the first few months of life until the end of the first year; for proteid is used to compensate for the wear and tear on the system and to provide for growth. As the infant grows older, the wear and tear become more, but the growth does not increase so rapidly, so the two demands nearly balance one another.

The protein of cow's milk seems to be completely absorbed except when hard curds are formed. We may give proteid in excess for a time and it continues to be almost completely absorbed, but if this is continued the retained nitrogen gradually diminishes to an amount equal to that which would have been held had the infant received the optimum quantity at first and no more.

This would seem to explain why an infant will gain at first if fed on skim milk and carbohydrate, but if this is continued indefinitely, he will cease to gain.

He has to say of the fat that the large amount which babies tolerate in mother's milk will not be tolerated if that fat be cow's milk. So one must stay within safe limits if he wishes to avoid trouble. For once a fat intolerance is established, it persists longer than that to any other food and throws the burden of supplying energy almost completely on the carbohydrates, and carbohydrates in excess are an insecure support for the young infant.

Southworth² gives us a practical point on the ammoniacal diaper which he believes is due to an excess of fat in the food causing a disturbed metabolism. This is best corrected by reducing the fat, but may be helped by the use of alka-

lies. He insists that it is a sign which, if left unheeded, may lead to serious digestive disturbance and acid intoxication later.

Hess³ uses his duodenal catheter to determine the pathogenesis of casein curds in the stool. The curds are formed in the stomach because they do not contain bile in the center and also because when the milk is introduced into the duodenum by means of the catheter they do not appear. He has found, with others, that heating the milk to the boiling point is the surest and best means of making them disappear, and thinks this should be resorted to rather than to allow them to persist.

In support of Finkelstein's contentions that the whey contains the elements causing convulsions in infants, Grulce⁴ quotes cases to show that they can be relieved readily by the use of a food consisting of the washed casein curds and a carbohydrate. In some of his cases he was able to make the convulsions recur by the addition of whey, and they were again promptly relieved by withdrawing it. From his experiments he is unable to determine which element of the whey is responsible, but proves quite conclusively that it is the whey.

Wilcox and Hill⁵ use protein milk in all forms of diarrhea, and consider it the best corrective for such disturbances. They first give it alone for four or five days until the stools appear nearly normal, when malt sugar is added. Plain milk then gradually replaces the protein milk in the formula. Most of their cases did well and were returned to plain milk formulas in about two weeks. Contrary to the statements of most observers on the use of protein milk, they have had success with young breast-fed infants, who were having difficulty in handling their mothers' milk.

Hoobler,⁶ as the result of metabolism experiments, states that the reason that protein milk is so valuable for infants, having diarrhea on other foods, is that it supplies the nitrogen in sufficient quantities to prevent the waste of muscle tissue, and that the sick baby absorbs the protein in this food as readily as well babies.

In a series of articles by Kendall,⁷ heat as the etiologic factor in summer diarrheas is discussed. He maintains that the theory will not hold, as

3. *Am. Jour. Dis. Child.*, June, 1913.

4. *Am. Jour. Dis. Child.*, March, 1913.

5. *Am. Jour. Dis. Child.*, April, 1913.

6. *Am. Jour. Dis. Child.*, April, 1913.

7. *Boston Med. and Surg. Jour.*, November, 1913.

1. *Am. Jour. Dis. Child.*, May, 1913.

2. *Arch. Pediat.*, October, 1913.

shown by the fact that the heat of last summer was extreme and protracted, and yet there were fewer admissions to the hospitals for this disease. He continues to champion the bacterial theory and points to the fact that during each year one organism is predominant in the intestinal flora of the severe cases. One year it is the dysentery, another the streptococcus and again the gas bacillus.

A most remarkable theory is advanced by Porter⁸ for cases of prolonged indigestion and wasting. He calls it pancreatic insufficiency, and attributes the cause to an infection of the pancreas. This theory is not new, having been suggested several years ago by Bramwell. The condition is probably the same as Herter's intestinal infantilism. The history of the typical case is that of several attacks of diarrhea, which finally become chronic, and the child fails to grow. The stool examination reveals the fact that most of the fat is passed as neutral fat and also very frequently contains undigested starches.

His theory of the cause is that the duodenum becomes infected with non-pathogenic bacteria, and these succeed in blocking the duct of the pancreas and finally gain entrance to that organ, where they cause fibrosis and interfere with the normal secretion of its ferments.

Duodenal ulcers in infancy are discussed by Holt,⁹ who cautions that we be mindful of the occurrence of such lesions. Where blood is vomited or passed in large quantities in the stool, it is suggestive. The only method likely to assist in the diagnosis is the passage of Hess' duodenal catheter.

Dunn¹⁰ reports 115 cases of heart disease in childhood wherein he had given special instructions regarding their activity. More of his patients lived who disregarded his instructions and led a life of normal activity. He therefore contends that the cardiac cases should not be guarded too closely, but allowed to lead a normal life in so far as they can without symptoms. This can best be accomplished by having them assume the normal life gradually.

Hecht¹¹ calls attention to the importance of deciding for prognosis, whether the heart block is due to an organic lesion or functional. He

reports a case of diphtheria in which atropin caused no change in the disturbed stimulus conduction, while the disturbance disappeared under atropin in a case of measles. In the former the symptom persisted unchanged after four months, but in the measles the disturbance disappeared entirely in three weeks, it being a functional block.

"The Treatment of Hemorrhagic Diseases of the New-Born" is the subject of a clear and concise paper by Vincent.¹² He discusses the relative value of the different methods in use. Ordinarily he prefers transfusion, for the reason that it relieves the accompanying anemia at once, and it is more certain. But he recognizes the value of the injection of human blood-serum and of the whole human blood. The latter is valuable because it can be done quickly and by one who is lacking in surgical skill. He suggests that when the case permits, the whole blood be injected at once and at the same time enough blood be withdrawn for future treatments.

Lindeman¹³ renders a formidable operation simple by using a syringe and proper cannulas. He thus performs a transfusion by withdrawing the blood from the donor and introducing it into the recipient. The cannulas are left in place in the blood-vessels, while the syringe is transferred from one to the other. Salt solution is used to prevent clotting.

Under tuberculosis, Wronker¹⁴ describes a practicable point in the papulonecrotic tuberculid. They are small, round, slightly raised, hard, flat papules about the size of a pin-head, and of red or reddish-brown color. They often present on the surface a crust which is easily removed, leaving a whitish depression which sometimes bleeds. They appear in crops and heal spontaneously in from four to eight weeks. They are of hematogenous bacillary origin. When found they always mean tuberculosis. The frequency of this lesion in tubercular infants is placed at 40 per cent. by Leopold and Rosenstern.¹⁵ They portend a very bad prognosis. They are most frequently found on the lower half of the back, the buttocks and the thighs, on the extensor surface of the forearms and legs and on the dorsum of the fingers and toes.

8. *Am. Jour. Dis. Child.*, August, 1913.

9. *Am. Jour. Dis. Children*, December, 1913.

10. *Am. Jour. Dis. Child.*, August, 1913.

11. *Ztschr. Kinderb.*, 1912, iv, 546.

12. *Arch. Pediat.*, December, 1912.

13. *Am. Jour. Dis. Child.*, July, 1913.

14. *Am. Jour. Dis. Child.*, June, 1913.

15. *Jour. Am. Med. Assn.*, 1912, p. 1723.

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EDITORIALS

ACID INTOXICATION IN INFANTS

While for some time there has been a belief that there was a definite etiologic relation in the findings of some of the products of acetone in the urine of children suffering from recurrent or cyclic vomiting, yet in the light of some more recent investigations we are hardly justified in placing a certain class of cases in the category of this disease.

Such a condition has been described by Abt just recently,¹ under the heading "Unusual Type of Acid Intoxication in Infants." In this article he calls attention to the fact that small quantities of acetone may occur in the urine of normal children, and also comments on the possible etiology of the product, confirming the general belief that carbohydrate is an important factor in fat and protein metabolism and that its absence leads to imperfect oxidation with the formation of beta-oxybutyric acid. The latter product is not readily demonstrable in the urine, but is oxidized into diacetic acid and acetone, and it is the presence of the latter which serves as a clinical index for the administration of acidosis.

Acetonuria may be present in a variety of clinical conditions even in the presence of considerable carbohydrate ingestion, and in these cases is probably due to some basic alteration in metabolism. It is found in the urine of children recovering from chloroform narcosis, in some gastro-intestinal disturbances of children after certain forms of poisoning, is sometimes produced by atropin, morphin, lead and antipyrin, in prolonged starvation from any cause, as after acute infectious diseases, particularly diphtheria, scarlet fever, measles and typhoid, as well as in diabetes and malignant disease. Acetonuria often occurs and has been described by Liefmann as a common concomitant of spasmophilia.

Abt calls attention to a series of cases of severe types of acid intoxication usually terminating fatally and occurring mostly in previously

healthy infants at about the weaning period. In some there had been a stationary weight curve for the previous several weeks, and, if breast-fed, signs of hunger and dissatisfaction with the food were apparent because of scanty or poor breast milk. Usually the onset was by gastro-intestinal symptoms, such as more or less diarrhea and vomiting, restlessness with moderate febrile reaction, the temperature rarely exceeding 101. Later this became lower and some cases showed no fever. The second or third days were marked by some abdominal distention, dyspnea, rapid respiration and pulse-rate, the respiration being labored, with marked activity of the accessory respiratory muscles. The liver was markedly enlarged, with plump edges and firm surface. The urine contained albumin, hyalin and granular casts, acetone and diacetic acid, but no blood nor sugar. About the third day stupor intervened, gradually deepening into coma. There were no marked blood-changes, the leukocytes varying between 9,000 and 12,000, with a normal differential count. Subsequently intestinal atony occurred with an inability to pass feces or gas, nor could evacuation be induced by mechanical or medicinal agents. A progressive abdominal distention was followed by cyanosis and dyspnea, unconsciousness continued and occasionally vomiting persisted until the end. The reflexes were present, and there were no symptoms of cranial nerve involvement, nor any pulmonary complications. Death usually occurred in four or five days after the onset.

Although the author has notes on nine cases, he presents case records of only four typical cases, of which the first serves as an example:

A year-old child of a physician was taken seriously ill with vomiting, after having nursed. Vomiting several times during the night, the vomitus consisting first of food, later of a clear watery fluid. In response to small doses of calomel the bowels moved the following day, though the vomiting continued. On the next day the respiration was rapid, pulse full, strong, moderately increased in rate; temperature 99.5. Examination of head and neck negative, some roughness over right upper lobe of lung, liver enlarged and doughy, abdomen flat. Though stuporous, the child presented no meningeal symptoms. The next day there was obstinate constipation, the vomiting continued and the abdomen was slightly tympanitic. Though there seemed to be abdominal pain, the child was inclined to sleep, but could be aroused. On the morning of the fifth day the condition became alarming; there had been no evacuation for twenty-four hours and no gas was

1. Am. Jour. Med. Sc., January, 1914.

passed. The next morning the respirations were rapid, pulse feeble, abdomen tympanitic and the child was plainly in collapse. The urine showed acetone and diacetic acid and a trace of albumin, with casts and leucin and tyrosin. The child grew progressively worse and died in the evening. The most interesting post-mortem findings were the extensive granular and fatty degeneration of the liver, with a picture resembling acute phosphorus poisoning. The kidneys showed an acute fatty and granular degeneration of the parenchymatous tissue. In the four cases in Dr. Abt's series wherein autopsies were performed the findings were similar to this one.

The only case wherein recovery took place was that of a child, the third of a family to be attacked by this syndrome, the other two having succumbed to what seemed to be the same affection several years previously.

A similar series has been reported by Thomas B. Parke, and mention is made of the same condition, with particular reference to Parke's series in Rachford's recent work on pediatrics.

So far there has been no rational explanation for this severe metabolic disturbance. Occurring as it does, often at the weaning period, it had been thought that possibly some derangement of the breast milk might be held accountable, but critical examination of such milk has failed to reveal any such abnormality. Abt does not lean to Parke's suggestion of the possibility of a bacterial organism, but thinks that the disease in question depends rather on some derangement of the infantile metabolism, resulting in the production of toxic products from misdirected chemical processes. He also suggests that there may be familial weakness of cells or organs, as in diabetes mellitus, wherein a marked predisposition to the disease occurs among entire families.

In the case terminating successfully, rectal infusions of 8 per cent. glucose and salt solution were given, together with large doses of sodium bicarbonate by mouth, of whisky or sour wine in half-dram doses every two hours, powdered casein in oatmeal gruel every two hours, soy-bean soup three times a day, occasional oxygen inhalations for the marked cyanosis and dyspnea and subcutaneous infusion of sodium bicarbonate.

In the description of these cases as well as in the actual clinical picture of an infant suffering from this grave disorder, one is struck by the alarming symptoms of the disease, apparently from its very inception. Attacking as it does an infant apparently in the midst of robust health, an intoxication sets in which so overwhelms the resistance of the little individual that

one's helplessness seems emphasized from the very start.

It is to be hoped that further studies in metabolism and a more thorough understanding of the part played therein by the various food principles will show us the way for a more rational and effective therapeutics for this desperate condition in children.

DR. WILLIAM H. WISHARD

In this number of *THE JOURNAL* we publish the obituary notice and an excellent picture of the late Dr. William H. Wishard, who died in his ninety-eighth year and who for nearly seventy-five years was a well-known Indiana physician and the last survivor of the charter membership of the Indiana State Medical Association.

Dr. Wishard was a wonderful man in more ways than one, and the history of his life is well worth careful study by the younger generation of physicians, who can profit from the example of a man whose life was singularly successful in the accomplishment of many things worth while for the good of humanity. From his earliest experiences in the wilderness down to the latter years of his life spent amid comfortable surroundings and among devoted relatives and friends, he set an example of professional ability and integrity which the medical profession can look on with the greatest admiration. His patriotism was shown when he enlisted his services in the Civil War, and his public spirit was manifested in numerous ways by his identification with every movement for the common good. His character, too, was such as to merit the confidence and respect of an ever-enlarging circle, which included men and women of all ages and of every walk of life. As one of his friends has well said: "He was one of the soundest, sweetest, most sincere, direct and lovable men, and he was ever young." Possessed of a wonderful vigor of mind and body, he continued to take an active interest in men and affairs until almost the last few days of his fatal illness, and those who had the pleasure of a short visit with him, even during the last year of his life, marvelled at the almost phenomenal memory and mental activity of one who nearly reached the century mark of life.

Dr. Wishard had a wide acquaintance with not only all of the medical men of the state, but men in every walk of life, and especially among many men who have been or are prominent in the state's affairs. He had a personal acquaintance with all of the governors of Indiana, and many

became his intimate friends. Because of his unusual physical strength, he continued to practice medicine until he was 90 years of age, and he was well up in the eighties when he drove about and personally attended many of his patients.

Dr. Wishard was content in the pleasure of doing for others, and his well-rounded life was full of accomplishments that make the world and the people living in it better for his having lived.

THE WASHINGTON ANTIVIVISECTION CONGRESS

The third Antivivisection and Animal Protection Congress has been in session in Washington during the past week. As the name indicates, the congress has represented two interests. So far as it was an animal protection congress, all could heartily support it, even the "vivisectioners" themselves, for no men have done more to protect animals from pain and disease than they. But so far as it was an antivivisection congress it was hostile to the very means which have proved most potent for alleviating the suffering of man and the lower animals as well. Under these circumstances it is impossible to judge the value of the lists of bishops, generals, senators, clergymen, governors, members of Congress and other public men widely advertised as vice-presidents of the congress, because it is impossible to know on which aspect of this two-faced organization they were looking when they permitted the use of their names.

Most prominent among the foreign members was the founder of these congresses, the widely heralded Miss Lindaf-Hageby, whose false statements a decade ago cost Coleridge \$25,000 in his suit with Bayliss, and whose attempt this year to refute the charges that she was a "deliberate and systematic liar, and that her antivivisection propaganda had been carried on by a systematic campaign of falsehood," resulted in a prompt verdict against her. Her present contention is that more is to be expected for human life and welfare from hygiene and sanitation than from drugs and surgery. That practically all the modern practice of hygiene and sanitation is firmly based on the results and methods of "vivisection" is a fact that seems to have been overlooked.

The Rockefeller Institute, which in the short period of its existence has given the medical profession an effective means of combating cerebrospinal meningitis, a new method for the diag-

nosis of syphilis and devices for artificial respiration in anesthesia and shock, not to mention other important discoveries, was the chief target for vilification. It was designated by various speakers as a "chamber of horrors," as a "working model of hell," and as a crown of a "toppling mass" of wealth, "tainted by lying, stealing, arson and murder."

The most sensational claim made at the meeting was that not uncommonly physicians inoculate unsuspecting persons, often children and other dependents, with the germs of disease, solely for experimental purposes. This statement has been published with big headlines in newspapers in all parts of the country. The evidence for it consisted in citing once more instances which have repeatedly appeared in antivivisection literature, and have repeatedly been shown to be false or without professional support. The "poisoning" of insane patients with thyroid extract was again mentioned, although the crafty deception in this charge has been made clear at least twice in the past twelve years.¹ The spraying of the nose and throat of patients with "poisons of diphtheria, small-pox, scarlet fever or consumption" was again instanced, although it has been disclosed that the person who confessed to have done this had also confessed that he had no standing in the medical profession, and, indeed, was quite in agreement with many antivivisectionists in disbelieving that bacteria cause disease.² The use ofluetin was again described³ as the "inoculation of the germs of a vile incurable disease," although it has been carefully shown that luetin was first proved wholly innocuous by injections into animals and into the discoverer himself, as well as into other physicians who volunteered for the test, and not until then was used for diagnostic purposes.

The public should definitely understand that the medical profession wholly repudiates and regards with abhorrence the employment of any procedure whatever which is in any way likely to injure rather than to benefit a patient who has entrusted himself, or who has been entrusted, to a physician's care. Such action would be absolutely at variance with the prime object of medical service—the welfare and the restoration of the sick.

Fortunately, the lay press is beginning to understand the unreliability of antivivisectionist

1. Cannon, Walter B.: *Characteristics of Antivivisection Literature*, Critic and Gulde, February, 1911; *Defense of Research Pamphlet XIX*, p. 10.

2. *Life*, May 26, 1910.

3. *Jour. Zoophily*, 1913, xxii, 4.

assertions. Various papers have commented on the "virulence and non-sensical folly" of the misstatements and misrepresentations of antivivisectionists, have recognized them "as peculiarly impervious to the facts," have asserted that they "wilfully hide the serious purpose underneath the experiments on animals," or have flatly declared that they are "promulgating the most outrageous falsehoods about men whose lives are devoted as unselfishly and as efficiently to the service of humanity as any that could be mentioned." Even one of the speakers at the congress was moved to urge his hearers to "stick to the facts" and to "cease making wild statements which they could not prove." Let us hope that some day they may do so.—*Jour. A. M. A.*, Dec. 20, 1913.

EDITORIAL NOTES

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better *Journal* for you.

DUES become delinquent February 1.

Do it now! Pay your dues for 1914. They were payable on January 1 and become delinquent on February 1.

We have a few extra copies of all numbers of *THE JOURNAL* published during the year 1913. We shall be pleased to supply these as long as they last to those of our readers who desire them to complete *THE JOURNAL* file for the year 1913.

The Sixth Councillor District Medical Society is not holding meetings and has not elected a councillor to succeed the one whose term of office expired during 1913. Under the circumstances it would seem that there is chance for some good organization work in that district.

In this number of *THE JOURNAL* we publish a letter from Dr. A. C. Kimberlin, retiring President of the Association and member of both the Scientific Committee and the Committee on Medical Defense. We also publish a letter from the President-Elect. These letters are worthy of the attention of each and every member of the Association.

STEER clear of the smooth promoter who tries to make you believe that he can make \$10 for you out of every \$1 that you give him for investment. A good thing does not go begging for capital. There are plenty of shrewd investors who are looking for an opportunity to place money where even a small return is reasonably assured. Promoters with a "good thing" do not have to hunt up doctors in order to get money for their enterprise.

THE antivivisectionist craze seems to be spreading. The most ardent supporters of this movement lie like a lot of turnip thieves. *The Journal of the American Medical Association* has very properly pointed out the glaring falsehoods which some of the ringleaders sprang at the recent antivivisectionist congress held in Washington. We are reproducing the editorial, and suggest that our readers keep it in mind when considering the antivivisection agitation, which is very apt to get a foothold in Indiana.

THE cure of cancer by radium is a subject that is receiving extensive newspaper comment at the present time, and it is unfortunate, like it is with most lines of investigation which receive publicity at the hands of the newspapers, that the value of radium in the treatment of cancer is receiving premature, if not unwarranted, approval. The ultimate effect of any new treatment requires not only extended observation and the employment of the treatment on a large number of patients, but the lapse of time to show the ultimate effect.

THE Medical Defense Committee has made a good showing for the year 1913. Many members of the Indiana State Medical Association are thankful that they have been able to take advantage of the medical defense feature and thereby have been saved trouble and expense in malpractice litigations. It is well to remember that delinquency precludes the possibility of securing the advantages of the medical defense feature of the Association, and as no physician is exempt from malpractice suits, it stands him in hand to retain his good standing by the prompt payment of dues.

SEVERAL of the county medical societies of Indiana are publishing monthly bulletins, and we commend this enterprise to all of the larger county medical societies of the state. We notice that the last bulletin of the LaPorte County Medical Society publishes the roll call for the

year, and it occurs to us that this is a good way to show to the members who is and who is not active. Some doctors attend a medical society meeting only when there is something to eat, or when they want to stir up trouble or take part in trouble. It is on those who attend with reasonable regularity that the brunt of the responsibility falls in keeping alive the organization and maintaining its ideals.

COUNTY medical society secretaries are reminded that we desire to have reports of the meetings of their societies for publication in our department devoted to society proceedings. The reports should cover the real proceedings, and should be in as few words as possible in order to do justice to the subject. Unimportant details and superfluous verbiage should be avoided. The essence of the average paper can be given in a paragraph or two, and sometimes in one or more sentences. The same is true of discussions. In addition to society reports, we are always pleased to have the secretaries furnish us with news notes and personals.

As an aftermath of the Friedmann episode, we have a New York company circularizing physicians with an offer to furnish the turtle tuberculin at \$15 per tube. We do not believe that any Indiana physicians will be deluded by the extravagant claims put forth in the literature that is so liberally distributed, nor will they take any stock in the announcement that Friedmann's serum has been lately perfected so that it is now the most efficient means for treating tuberculosis. However, we feel disposed to suggest that doctors who are wise will steer clear of turtle tuberculin and everything else which savors of the Friedmann humbug.

OF all of the shameful impositions that are practiced on suffering humanity, one of the worst is the promises of proprietary medicine manufacturers to cure consumption by the administration of medicines. Just now the Indiana newspapers contain the advertising of the promoters of "Nature's Creation," one of the worst fakes that ever was put on the market. The opinion is created through published testimonials and skillfully worded advertising copy that consumption is cured by taking "Nature's Creation." A more despicable and thoroughly dishonest exploitation game was never played, and we wonder why newspaper editors who make any claim of honesty are a party to such deception and fraud.

THE Secretary wishes to acknowledge the prompt response to the notice in the December number of *THE JOURNAL*, and to thank Dr. E. L. Annis of LaPorte for the copy of the 1882 transactions, and Dr. D. Brooks Smoot of Washington for the copies of the 1878 and 1882 transactions. Dr. G. W. H. Kemper also presented a very rare copy of the 1873 transactions. Beginning with that date the file is now complete with the exception of 1874.

Curiously enough, in the 1882 transactions was a circular letter issued by Dr. E. S. Elder, then secretary, calling for copies of the old transactions, as they were needed to complete the files. He very probably succeeded in getting several complete sets, but unfortunately the same were not handed down to the succeeding secretaries.

DURING the past year we have had some complaints from county medical society secretaries to the effect that some members are not receiving *THE JOURNAL* regularly. We desire to repeat what we have announced time and time again, that members who have paid their subscriptions to *THE JOURNAL* can rest assured that their names go on the mailing-list within twenty-four hours from the time such names are received from Secretary Combs. *THE JOURNAL* is sent regularly to all subscribers until they become delinquent. If any subscriber fails to receive his *JOURNAL*, a duplicate will be sent if notification is sent promptly. Any subscriber who fails to receive a complete file of *THE JOURNAL* during the time he is entitled to it has no one to blame but himself if he fails to write us concerning the matter.

For the benefit of the new secretaries that have just been elected, the policy of the Association concerning new members should be defined. Every secretary should have a supply of application blanks, furnished by the state office, and the dues of a new member should be accompanied by this blank properly filled out, as a card index of the biographical data of the members is kept.

Members in good standing who pay their dues for the current year in other county societies in this state may be transferred without paying additional State Association dues. Members in good standing in other states may be transferred to county societies of this state with or without the payment of local dues, at the option of the local society, but such members are not in good standing in the State Association unless the state dues are paid. The membership privileges differ in other states, and thus far there has been no

scheme of interstate transfer without repayment of dues. Non-resident physicians cannot belong to the county society except on permission of the society existing in the county of their residence.

In sending the state dues, please remit by check or money order so that in case of loss through the mails or any misunderstanding the remittance can be traced.

At last the American College of Surgeons has made public the list of those who were awarded the degree of F.C.S. at the Chicago convocation. The list of Indiana Fellows is as follows:

| | |
|-----------------------------|----------------|
| Paul J. Barcus..... | Crawfordsville |
| Charles E. Barnett..... | Fort Wayne |
| John F. Barnhill..... | Indianapolis |
| L. D. Brose..... | Evansville |
| Albert E. Bulson, Jr..... | Fort Wayne |
| Edgar Cox | Kokomo |
| Joseph Rilus Eastman..... | Indianapolis |
| Thomas Barker Eastman..... | Indianapolis |
| A. M. Hayden..... | Evansville |
| Norman E. Jobes..... | Indianapolis |
| S. C. Loring..... | Plymouth |
| Frank A. Morrison..... | Indianapolis |
| J. H. Oliver..... | Indianapolis |
| Hugo Otto Pantzer..... | Indianapolis |
| Miles F. Porter..... | Fort Wayne |
| Marcus Ravdin | Evansville |
| Maurice I. Rosenthal..... | Fort Wayne |
| Charles Stoltz | South Bend |
| George K. Throckmorton..... | LaFayette |
| Ernest de Wolfe Wales..... | Indianapolis |
| Edwin Walker | Evansville |
| Leon J. Willien..... | Terre Haute |
| William N. Wishard..... | Indianapolis |
| Jonathan P. Worrell..... | Terre Haute |

THE change in the membership receipts issued this year has occasioned some comment concerning the line which reads "Benefits to date from the time this is received by the state secretary." One secretary writes that while this is for the purpose of stimulating the members to prompt payment of dues and also to make the local secretary prompt in forwarding the same, both of which ideas are commendable, a third factor should be considered also. The mail service is not in every instance reliable, and there may be a delay in delivering the letter. If this is the only criticism, it may be stated for the benefit of those who share this view that whenever the fault is not due to the member or the local secretary, medical defense will begin promptly and with

every consideration for the rights of the member. The Minnesota State Medical Association has this scheme also, and since our Association must pay out money for medical defense it should have the privilege of having its own officers determine the question of membership. If the member complains that he is liable to be the victim of a dilatory local secretary, he needs to be reminded that he helps elect the secretary for this purpose and presumably will choose one that will give him the least trouble. Any delay in receiving the membership cards, after paying dues, should be investigated at once by writing to the state secretary. With all of the precautions that the state office takes in behalf of the member, and with this explanation of how he can protect himself with very little trouble, it would seem unjust for any member or any secretary to complain.

THE Wisconsin marriage law went into effect the first of January. According to the provisions of the law, those who desire to be married must present a health certificate, and the law provides that the examination and certificate of the physician is to be paid by a fee of not to exceed \$3. If the applicant is indigent, the examination may be made by the county physician without charge. The law further provides that any physician who shall knowingly and wilfully make any false statements in the certificate, shall be guilty of perjury, and under conviction shall have his license revoked. Concerning the kind of a certificate to be furnished, the law provides that the certificate of the physician shall show that the applicant is free from any acquired venereal disease, so nearly as can be determined by physical examination and by the application of the recognized clinical and laboratory tests of scientific research. Already there is opposition on the part of the Wisconsin medical men to the clause which requires an examination to be made for \$3, and it is very justly claimed that such an examination as the law requires means not only a physical examination of the applicant, but also a microscopic examination for the detection of gonococci and a Wassermann test for syphilis. The making of this examination requires a laboratory equipment so expensive that few physicians possess it. The customary fee for a Wassermann test is from \$10 to \$25. Even the larger commercial laboratories, especially equipped for such work and making many such examinations daily, charge a fee of \$5. This amount must be recognized as the smallest sum for which such an examination can possibly be made. A conscientious examination for the detection of gonorrhea

should also entitle the examiner to an adequate fee. Yet the Wisconsin law provides that the physician shall make both of these examinations, as well as a physical examination for \$3. As the *Journal of the A. M. A.* well says, this is not only absurd, but unfair and unequitable. It places on the medical profession the financial burden of enforcing a law made solely for the public good. The state should provide for the enforcement of such a law at the expense of the entire public, and not at the expense of a small portion of it.

THE New Year is usually considered the time for "turning over a new leaf," or, in other words, making resolves to change things for the better. Perhaps it is better to make resolves on the beginning of the year than not make them at all, but to our notion it is a good plan to put good resolutions into effect whenever they are needed and at any time of the year. However, following the usual custom, it is well for each of us to take an inventory of the past and determine how we can profit by our experiences. For the most of us the future holds out possibilities which are for our good as well as the good of those we come in contact with, providing we make most of the possibilities. If we are content to continue plodding along in the same old rut we usually find ourselves worse off at the end of the year than we are now, and less satisfied with ourselves and everything about us. On the other hand, if we, figuratively speaking, put our best foot forward and take advantage of the opportunities for improving our condition, we usually find plenty to do at the end of the year and are satisfied with the results accomplished. In a professional way there is much to be desired by each and every one of us in the way of increasing our fund of knowledge as to how best to serve suffering humanity. Books, journals, clinics and societies offer us an avenue through which we can increase our store of knowledge and learn how to profit by the experience of others as well as ourselves. From a business standpoint we have much to gain from analysis of conditions which confront us. On every hand there is a demand for competent and honest service in every walk of life. This demand reaches out to the medical profession with greater emphasis than ever before, and the physician who is to attain and merit the highest degree of success must of necessity fit himself for the work before him by taking advantage of every opportunity afforded for increasing his knowledge and skill. Aside from this, he must meet the increasing modern demand for attention along the most progressive lines and in

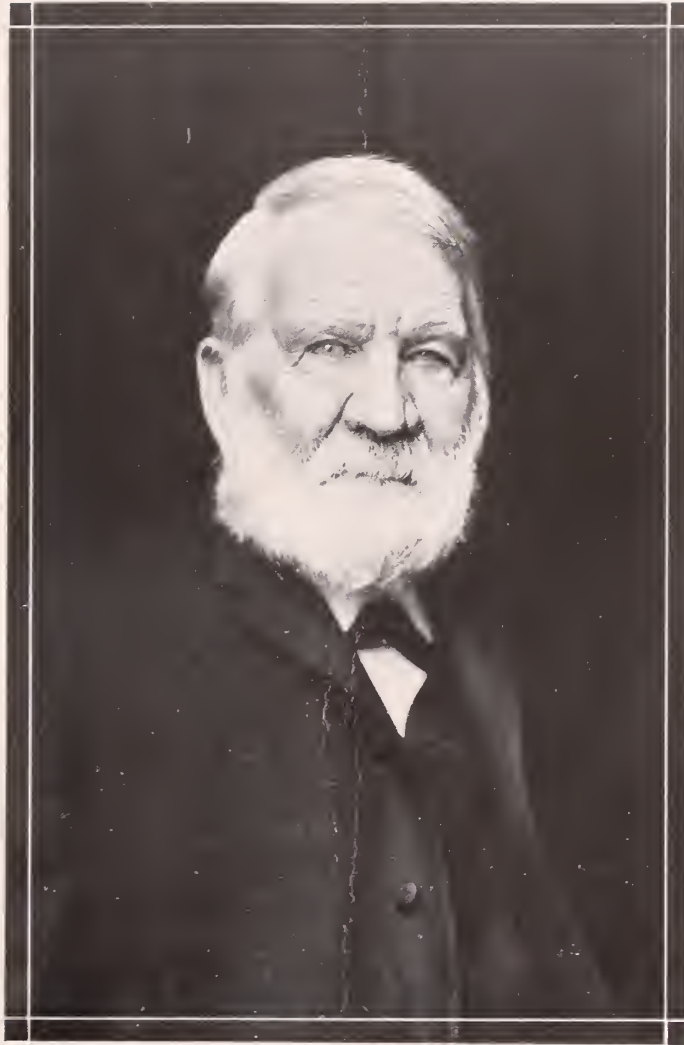
accordance with that honesty and sincerity of purpose which always should mark the conduct of the true physician. In keeping with this spirit, it is not possible for us to overlook the necessity of improving our minds and divorcing ourselves from commercial practices and questionable acts which interfere with the exercise of that ability and conscientiousness which deserve and retain the confidence of those on whom we are called to serve.

OBITUARY

DR. WILLIAM HENRY WISHARD

The death of Dr. William Henry Wishard at his home in Indianapolis, Dec. 9, 1913, removed the last connecting link between the pioneers of the medical profession of Indiana and the present. He was the last survivor of that company of eighty-four physicians, who organized the Indiana State Medical Society in 1849. In a very striking way he combined the characteristics of a doctor of the old school with the modern physician. Dr. Wishard was born in Nicholas County, Kentucky, Jan. 17, 1816, and came to Johnson County, Indiana, nine miles south of Indianapolis, when he was 9 years of age. He is descended from that sturdy race, the Scotch-Irish, that not only has convictions, but the courage to live up to their understanding of one's duty to his God, to himself and to the world. His father was Colonel John Wishard, a native of Pennsylvania, who gained his military title from his services in the Black Hawk War with the Indiana Militia. His mother was Agnes Oliver Wishard, a native of Kentucky. Colonel Wishard had strong convictions on the slavery question, and left Kentucky in order to rear his family in an antislavery state. He died at the age of 86 years.

In 1840 Dr. Wishard was married to Harriet Newell Moreland, daughter of Rev. John R. Moreland, a Presbyterian minister of early Indiana. Of the nine children born to them, the first four died in early childhood, leaving three sons and two daughters: Dr. William N. Wishard; Albert W. Wishard, attorney, Indianapolis; George W. Wishard, in the farm loan business in Minneapolis, Minn.; Mrs. John G. Wishard, Wooster, Ohio; Miss Elizabeth Wishard, Indianapolis. Mrs. Wishard died in April, 1902. The oldest of eleven children, he leaves but one brother, Rev. Samuel E. Wishard, D.D., Los Angeles, Cal., who visited him but a few weeks previous to his death.



William H. Wishard, M.D.

1816 - 1913

Dr. Wishard received the only education available to boys in the primitive days of Indiana, and attended the log schoolhouse of the neighborhood. At 22 years of age he left his father's farm and entered the office of Dr. Benjamin S. Noble at Greenwood, a brother of one of Indiana's early governors, with whom he formed a partnership that lasted ten years. As has been aptly said, medical education in those days was more like apprenticeship to a trade, and the limitations under which a young physician began his career would be considered almost insurmountable today. The story of Dr. Wishard's early experience as a practitioner is an interesting recital of the hardships of pioneer life and the heroic struggles of an energetic young physician to overcome the handicap placed on him by limited facilities for doing the work of his profession. After practicing awhile he first attended lectures at the Ohio Medical College at Cincinnati, afterward going to the old Indiana Medical College at LaPorte, Indiana, where he graduated, and again went to the Ohio Medical College for another course of lectures. He continued to practice at Greenwood until just before the breaking out of the Civil War, when he removed to his father's farm near Glenn's Valley, which he had purchased, and which his father had acquired from the government. He soon went to the front as a volunteer surgeon with the Fifty-Ninth Indiana Regiment and later with the Eighty-Third Regiment.

To Dr. Wishard is given the credit for bringing about the order that led to the sending home from battle-fields and hospitals all sick and wounded soldiers. His experiences as a surgeon soon led him to see that the facilities for caring for the disabled soldiers were wholly inadequate to their needs. He reported these facts to General Stone, Quartermaster General of Indiana, who went as Governor Morton's personal representative to interview the chief surgeon of General Grant's staff, with a plea from Governor Morton to permit the Indiana soldiers, who were incapacitated for duty, to be sent home. The chief surgeon briefly and curtly told him he could say to Governor Morton that the medical department of the army was able to take care of its work without his suggestions. General Stone then asked Dr. Wishard to collect all the facts pertaining to the disabled troops belonging to the department of Mississippi, after the surrender of Vicksburg, and immediately General Stone returned home and gave Governor Morton this report, and the same night the Governor started for Washington and without delay presented

these facts to President Lincoln, who immediately called his cabinet together and gave Governor Morton an opportunity to personally present the subject. Secretary of War Stanton claimed the reports were not accurate, and said if Indiana were given this privilege other states would claim they were discriminated against. The President sent for Surgeon-General Barnes, who investigated and found that the reports sent in by the army surgeons, through official channels, did not vary 3 per cent. from the report of Dr. Wishard, presented by Governor Morton. At once the President instructed Secretary Stanton to issue a general order soliciting the governors of all states to cooperate in removing to their homes the sick and disabled soldiers. The order was not received kindly at first by the medical officers of high rank in the army, but the President was firm and said it was an act of necessity and consideration for the comfort and welfare of the soldiers that must be complied with.

Dr. Wishard gave two and a half years of service to his country, accepting no compensation whatever except for his actual expenses. While at home he never charged for the professional services he bestowed on the families of those who had gone to the front, and in after years he extended the same courtesy to the widows and dependent orphans of the soldiers, which included gratuitous furnishing of medicines to them. In 1864 he removed to Southport and continued his practice until 1876, when he was elected coroner of Marion County, and located in Indianapolis. He served in that office two terms, retiring in 1880. He was elected President of Indiana State Medical Society at its fortieth anniversary in 1889, and in 1904 was elected President of the Indianapolis Medical Society. He was a charter member of both these organizations. The members of the Indianapolis society celebrated his retirement from that office by calling on him in a body on his eighty-ninth birthday and presenting him with a beautiful parchment, appropriately inscribed and bound in a Morocco covering. His sons presented an oil portrait of him to the Indianapolis Medical Society on his ninetieth birthday, a day that was observed by many friends and relatives who called on him.

Dr. Wishard's life was not wholly given to his professional work. His was not a one-sided character. He loved his church and gave freely of his time and efforts to its advancement. For more than seventy years he was an elder in the Presbyterian Church and frequently went as a representative to the different official gatherings

of that denomination, acting as commissioner of the Indianapolis Presbytery at six meetings of the General Assembly, the highest body of the church.

During his advancing years when the infirmities of age cut him off from direct association and participation in the activities of his profession, he never lost interest in the progress of medicine, rejoiced at every step in scientific progress and had an enthusiastic faith in the high calling of his profession that he maintained to the very last. Dr. Wishard believed that no man had greater opportunities for usefulness than a physician and never failed to improve every occasion for sowing seeds of righteousness as he went about doing the work of the beloved physician. He ministered to the sin-sick as he healed their bodies; he preached the gospel of love and kindness as he went in and out of the homes of the well-to-do and the poor and the outcast. He was no respecter of persons when it came to the giving of his professional services: all received alike the best he could give, whether it meant remuneration or a free-will offering. His daily life was an exemplification of the highest ideals of Christian manliness; his character was spotless and bore no stain of dishonesty or professional trickery. He had a deep abiding faith that never wavered; a hope and trust that kept him joyful and full of anticipation for the future.

He was an inspiration to the younger members of the profession, for whom he had a genuine love and sympathy, and to whom he always spoke a word of encouragement and hope whenever he had the opportunity.

At the memorial services held by the Indianapolis Medical Society, Dr. A. C. Kimberlin, in speaking of Dr. Wishard, said: "Some of my greatest incentives to an open, frank and straightforward living came from Dr. Wishard. A young man only needs the acquaintance and association of a few men of his character."

Dr. Grenfell, that remarkable apostle of healing to the people of Laborador, has said, in writing of his interpretation of Christian faith: "In my bluest moments of life and in many hours facing death, I have never had one single doubt." With that sublime confidence, born of long years of fidelity to God and conscience, Dr. William H. Wishard went quietly to sleep, loved and honored by countless friends, leaving a name that will live in history and a memory that will long be cherished.

The funeral services were held at the home of his son, Dr. William N. Wishard, Friday aft-

ernoon, Dec. 12, 1913, conducted by Rev. C. R. Shaver and Rev. M. L. Haines, D.D. Burial at Crown Hill Cemetery.

The following gentlemen served as active pallbearers: Dr. Thomas B. Noble, Dr. H. G. Hamer, Dr. W. E. Tinney, Dr. Stephen Egart, Mr. H. H. Bishop of Indianapolis and Dr. J. A. McCracken, Bellefontaine, Ohio.

Honorary pallbearers: Dr. L. D. Waterman, Dr. G. V. Woollen, Dr. A. C. Kimberlin, Dr. H. O. Pantzer, Dr. Theodore Potter, Dr. A. W. Brayton, Dr. F. C. Heath, Dr. Louis Burckhardt, Dr. C. F. Neu, Dr. F. B. Wynn, Mr. T. C. Day, Capt. William Wheat, Mr. Morris Ross of Indianapolis. Dr. G. W. H. Kemper, Muncie, Ind.

Resolution adopted by the Indianapolis Medical Society at the memorial meeting held for Dr. William Henry Wishard, Thursday evening, Dec. 11, 1913:

Mr. President and Members of the Indianapolis Medical Society: Once more we are called on to pay tribute to a departed brother. In this instance it is more fitting to praise than to lament. He, in his ripe old age, had no need for our lamentation. This time our departed brother is Doctor William H. Wishard, a patriot in medicine—a patriot in Indiana.

He developed with the vastness of a great frontier state and was a distinct part of its development. He was an integral force in the medical, social, religious and political life of the state. He stood for natural growth and grew along with the development of a pioneer state to that of a civilized flower. He stood for social purity, Christian benevolence and everlasting truth.

His life reminded us of the great towering, dignified trees of Indiana—the symbol of sturdiness and power. He was one of the fathers of Indiana medicine and this was his work. He belonged to the "old school of family doctors" which has passed away with these grand old patriots in medicine. He believed in the curative power of medicine and was a strong advocate that somewhere nature had deposited a cure for all ills.

His knowledge of medicine and his educational attainments were largely obtained from the university of nature. His books were the trees, rivers, flowers, people and associates. So great were his attainments that he was honored by this society as its president and has had during his professional life numerous obligations and honors conferred on him which he has used with dignity. He lived a full life in acts and deeds as well as in years. Therefore let us

Resolve, That we have lost a good friend; a wise counselor in medicine; a patriotic citizen of the state and community; and a dignified Christian gentleman to emulate in the death of Doctor William H. Wishard.

G. V. WOOLLEN,
A. E. STERNE,
WM. T. S. DODDS.

Address given by Dr. F. C. Heath at the memorial meeting held by the Indianapolis Medical Society in honor of Dr. William H. Wishard, Thursday evening, Dec. 11, 1913.

"Sure the last end of a good man is peace." The Good Book pictures a man of years to whom the

infant Savior was taken for a blessing, a just man, a devout man, full of faith and hope, his exalted character being but the ripened fruit of a true and virtuous life. Such a man was our beloved friend, Dr. William H. Wishard, whose loss we mourn to-night.

Strong characters need certain factors for their development. Is it heredity or environment that counts most in a man's life? Is it not true that both are essential elements? There must be somewhere in one's ancestry the seeds of character, and there must be, in his life, experiences that will furnish the soil and elements for growth and full fruition. Of an ancestry that figured among the religious martyrs of Scotland and among the heroes of the American revolution, it is not strange that our friend showed in his life fidelity to duty, constancy in virtue, loyalty to truth. Had he been born to wealth and ease, these qualities might have become dormant, but as a pioneer and a constant worker with difficulties of every kind before him, he found that discipline in his experience that made him strong and useful in his long career as doctor, citizen, parent and brother man. Of him could it be truly said: "He was a friend to man."

Born in Kentucky, Jan. 17, 1816, he came to Indiana with his parents when nine years old, settling ten miles south of Indianapolis. Nearly all his days were spent, therefore, in this city or its immediate vicinity. He saw Indianapolis grow from nothing, or next to nothing, to the greatest inland city of America. He personally met and knew every governor of Indiana, from Jonathan Jennings to Samuel M. Ralston.

The boys of that early day had none of the advantages of to-day. Yet, in many ways, this was a blessing—to have to do things for one's self, to brave dangers, surmount difficulties, meet emergencies; what better school to draw out and develop strength and sturdiness of character? His educational advantages were limited as far as attendance at school was concerned, but he made the most of what he had, and learned more in the university of life.

In 1838, at the age of 22, he began his medical studies, supplementing them by attending lectures in the Ohio and Indiana medical colleges, and in 1840 he became the partner of Dr. Benjamin S. Noble, later of Dr. Thomas B. Noble, and still later of Dr. Thomas B. Noble, Jr., having thus been in partnership with three generations of the Noble family. Throughout his career of nearly seventy years in the active practice of medicine, he shirked no duty, but responded to the sufferer's call with little thought of self or ease or fee. He went about quietly doing good in the footsteps of the Great Physician. Doubtless he received the blessing given those who minister in His name: "For blessings ever wait on virtuous deeds, and though a late, a sure reward succeeds." Alike unselfish in his public life, he rendered his great war service for the good of the cause without a penny of financial compensation, including the grand work of bringing the sick and wounded from Vicksburg to the hospitals of the North, and as coroner of Marion county from 1876 to 1880, when others were concerned about questions of politics or personal gain, he kept up a steady, unflinching fight for the right and against the wrong without fear or favor.

It is but natural that such a man should have received honors from his associates in the great profession of medicine, and he alone had the distinction of having been president and charter member of the Indiana State Medical Association and the Indianapolis Medical Society. He was the last survivor of those who met in 1849 to organize the state association, was elected president in 1888, his annual address, "A Retrospect of Fifty Years of Practice," picturing vividly the progress of medicine and the change in its

practice from the simplicity and hardships of the early times to the day of modern methods and modern advantages. Among the many striking things in the address were his forcible contrast between the big families of the past and the small ones of the present and his good advice to young doctors: "Let not our young men debase their calling for filthy lucre, but keep the professional robe unsullied from this offense against the laws of God and man."

He visited his patients for years on horseback. He was a passenger on the first railroad train from Madison to Indianapolis in 1847. Many will recall a paper read before the County Medical Society some twenty years ago on "Medical Men and Medical Practice in the Early Days of Indianapolis," a truthful and kindly record of his worthy compeers. Upon his retirement from the presidency of the Indianapolis Medical Society, his eighty-ninth birthday anniversary, he was presented with a beautiful illuminated scroll, containing resolutions of respect, affection and veneration for his worth. Two years ago he made the address of welcome to the State Medical Association on behalf of the local society, speaking as follows:

"*Mr. President and Gentlemen of the Indiana State Medical Association:* I regret that I have not the mental or physical ability to do justice to an occasion of this kind. It overpowers me to meet you here to-day. Where, oh, where, are the men who were with me when we organized this society? Gone to that bourne from which no traveler returns. I am the only one who survives.

"It is a great privilege to meet with you here to-day—and I was going to say, see you; but I cannot see you. It is a privilege I did not expect to have, but I thank you for the welcome you have given me. I thank God that I am permitted to meet with you once more this side of the Great Beyond.

"There are many things I would like to speak of, but my infirmities, the result of old age, are such that I decline to enter into any discussion or lengthy talk. But I welcome you to our city, where the organization first met. I welcome you as medical men who have fought battles for humanity and advanced the science of medicine. When I look back to Chapman's Therapeutics and Cooper's Surgery, the works I read beginning with the 28th day of February, 1838, and compare them to-day, it is not the same profession. I look at these books as relics of bygone days.

"Now, permit me not only to welcome you, but to advise you to rise in the future, as your fathers have in the past, in medical science and moral worth, and in everything that goes to make up a true man and worthy citizen."

He had a natural eloquence, a ready wit, a keen and forceful intellect. As Dr. Brayton well says in his biographical sketch contributed to Stone's Eminent American Physicians and Surgeons, "he would have graced the pulpit, or been an ornament of the bar; or brought dignity and virtue into political life, had his desires led him along any one of these pursuits rather than to the practice of medicine."

Dr. Wishard was a Presbyterian elder for nearly seventy years. He believed in a religion of hope and joy and peace. He lived that religion in his daily life—and it is such lives as his that form the strongest arguments for the truth of Christianity—a sunny and kindly life, a life of faith in God and the triumph of right, a life of influence for virtue, peace and hope. We all loved him, we are better for having lived with him here; we mourn his loss as one personal to ourselves. Surely we can say of him:

"A truer, nobler, trustier heart,
More loving or more loyal, never beat
Within a human breast."

J. W. PATTERSON, M.D., died at his home in Fairmount, December 26, of Bright's disease, aged 54 years.

J. J. FLEMING, M.D., died at his home near Mt. Pleasant, December 12, from a complication of diseases, aged 86 years.

WILLIAM C. COOPER, M.D., died at his home near Lawrenceburg, December 8, at the age of 79. Dr. Cooper was for many years editor of the *Medical Gleaner*.

WILLIAM R. GENUNG, M.D., Fort Branch, died January 1, at the age of 87 years. Dr. Genung was born in Elizabethtown, N. J., graduated from DePauw University in 1845, and from the University of New York in 1852.

R. A. SMITH, M.D., Knightstown, died at St. Vincent Hospital, Indianapolis, December 15, following an operation. He was born in Hancock County, Ind., in 1843, began the study of medicine in 1866 at Indianapolis, finishing his course at Cincinnati in 1870.

CALEB M. LOWDER, M.D., died at his home in Dugger, December 9, of heart disease. Dr. Lowder graduated from the Indiana Medical College, at Indianapolis, in 1881, shortly after that locating in Dugger, where he continued the practice of medicine until his death.

RAPHAEL T. THRALLS, M.D., died at his home in Hymera, December 19, of tumor of the face, aged 59 years. He was born near Goshen, began the study of medicine under Dr. B. F. Swafford of Terre Haute, completing his medical education at the Indiana Medical College, Indianapolis, and the Rush Medical College, Chicago.

MICHAEL A. JORDAN, M.D., of Logansport, died at the Johns Hopkins Hospital, Baltimore, Md., December 13, following an operation for cancer of the stomach. Dr. Jordan was born in Ireland in 1855, received his education in the Tippecanoe County schools, Stockwell College, and graduated in medicine from the Ohio Medical College in 1879.

CHARLES S. LITTLE, M.D., died at his home in Petersburg, December 13, of heart disease, at the age of 40 years. Dr. Little was born and received his early schooling at Evansville, Ind. Following his graduation from the Evansville

high school, he entered Wabash College, Crawfordsville, later took up the study of medicine and graduated from Johns Hopkins University in 1899. He began the practice of medicine in Evansville, but after two years gave up his practice to become instructor in pathology in the College of Physicians and Surgeons at Indianapolis, which position he held for some time.

NEWS NOTES AND PERSONALS

INDIANAPOLIS

THE sanitary building code, which is supplemental to the new sanitary schoolhouse law, has recently been adopted by the State Board of Health.

THE People's Union is making plans to establish in Indianapolis a new cancer hospital, devoted entirely to the treatment of cancerous growths.

DR. CHARLES S. WOODS has accepted the professorship of preventive medicine in the University of Iowa, and has moved to Iowa City to take up the college work.

GENERAL

DR. W. M. BYERS of LaFayette has returned from a hunting trip in New Mexico.

DR. AND MRS. C. A. WHITE of Danville have been taking an extended trip through the South.

DR. E. A. EVANS has recently been named as secretary of City Board of Health of Clinton.

DR. G. W. SPOHN of Elkhart has resumed practice after a complete recovery from typhoid fever.

DR. O. I. REASONER of Muncie, who suffered serious injuries in a fall December 23, is improving.

THE trial of Dr. C. M. Clayton for the murder of Joseph Stout, at Indianapolis, has been set for February 23.

DR. H. P. BUTTS, formerly of Crothersville, Ind., has located at Pierceville, Ind., where he will continue to practice medicine.

DR. H. S. THURSTON, Indianapolis, announces the removal of his office from the Willoughby Building to 624 Hume-Mansur Building.

THE City Council of Shelbyville has voted that the unexpended flood funds, amounting to \$1,116.15, shall be used for hospital purposes.

THE Peru hospital, formerly known as the Dukes Hospital, has changed its name and will now be known as the Miami County Hospital.

DR. SIMON J. YOUNG has discontinued his practice in Indianapolis and located at Valparaiso, Ind., where he formerly practiced medicine.

DR. G. B. HOOPINGARNER has been appointed as secretary of the Elkhart City Board of Health and Dr. L. A. Elliott is a new member of the board.

DR. A. B. DARBY of Waterloo, one of the oldest physicians of DeKalb County, was married on Christmas Eve to Miss Minnie Meister of Pettisville, Ohio.

A DONATION of 160 acres of land near Houston, Texas, has been made to the Robert W. Long Hospital, Indianapolis, by George T. Kerr of Broad Ripple.

DR. E. M. CONRAD of Anderson had a narrow escape December 23, when his automobile was struck by a freight train and completely demolished. Dr. Conrad was scarcely injured.

DR. NETTIE BAINBRIDGE POWELL has been appointed secretary of the Marion City Board of Health. This is a distinctly new recognition of women in the medical profession of Indiana.

THE Elkhart Academy of Medicine has elected the following officers for 1914: president, Dr. J. A. Work, Jr.; vice-president, Dr. E. M. Hoover; secretary-treasurer, Dr. Hannah O. Staufft.

THE Northern Tri-State Medical Association held its midwinter meeting at Kalamazoo, Mich., January 13. Dr. George W. McCaskey of Ft. Wayne is the president, and Dr. George W. Spahn of Elkhart is secretary.

THE Commissioners of Hamilton County recently appropriated \$30,000 for the erection of a new hospital, and the committee in charge have purchased the Harrell Hospital at Noblesville, which is considered one of the best in the state outside of Indianapolis.

THE *American Journal of Clinical Medicine* will celebrate its twenty-first anniversary with an especially large and interesting January number, giving its plans and program for the coming year. This program includes articles by some of the most prominent men in the medical profession.

WANTED—Twenty live, up-to-the-second papers for use this year. Let's make this the big year in a literary way. Some of you sponges who have been absorbing for years, give us a chance to squeeze you just once. You owe it to us—please deliver.—January *Bulletin*, Lake County Medical Society.

THE Indiana University School of Medicine will open this winter a training school for nurses in connection with the Robert W. Long Hospital, the hospital of the Indiana University. This school offers general training in all branches of practical nursing. The course is of three years' duration. All applicants for admission must comply with the entrance requirements of the collegiate department of Indiana University, and all courses given will be of collegiate grade.

THE members of the medical profession have been cordially invited to attend a course of lectures to be given at the pathological department of the Central Indiana Hospital for the Insane, located at Indianapolis. The lectures are free to practitioners and students of medicine, and others will not be admitted except on special permission by the superintendent or lecturer. The second section began January 6, and will continue until March 17, inclusive. Some of the reputable neurologists and internists of Indiana are represented on the lecture force. Communications concerning the course can be secured from Dr. George F. Edenharter, Indianapolis.

SINCE December 1 the following articles have been accepted for inclusion with New and Non-official Remedies:

Elarson; Elarson Tablets (The Bayer Company, Inc.).

Sterile Ampoules of Mercury Salicylate; Salvarsan—"606"—Ehrlich, Suspension in Ampoules; Neosalvarsan, Ehrlich, Suspension in Ampoules (Hynson, Westcott & Co.).

Sodium Acid Phosphate (Mallinckrodt Chemical Works).

Emetine Hydrochloride Ampoules (Parke, Davis & Co.).

Sodium Acid Phosphate (Powers-Weightman-Rosengarten Co.).

Radium Chloride; Radium Sulphate (Radium Chemical Co.).

Change of title:

The manufacturer having changed the name Essence of Pepsin, Fairchild, to Pepsencia, the Council directed that the corresponding change of title be made in New and Nonofficial Remedies (Fairchild Bros. & Foster).

Articles omitted from N. N. R.:

Having been withdrawn from the market, the Council voted that Glycerole Trypsin, Armour, be omitted from New and Nonofficial Remedies (Armour & Co.).

Having voted not to accept papain for inclusion with New and Nonofficial Remedies, the Council voted to omit the Aromatic Cordial, P. M. Co., from the appendix to New and Nonofficial Remedies (Pitman-Myers Co.).

CORRESPONDENCE

OUR ASSOCIATION'S ACTIVITIES

INDIANAPOLIS, Jan. 1, 1914.

To the Editor:—In response to your request I have the following hastily prepared comments and suggestions concerning our Association's activities:

In arranging the program for this year's session of the Indiana State Medical Association, the Committee on Scientific Work, realizing that reliable, practical knowledge is most appreciated by the average physician, intends to make the program of especial value and interest to every member. It is hoped that the program will be made up of papers from members located in various parts of the state, and any member who contemplates or has any desire to present a paper should begin at once to collect data and do special study on the subject selected so that the paper not only may be an up-to-date presentation, but that an abstract may be furnished for publication in the August number of *THE JOURNAL*. Those failing in the latter should be recorded as unprepared and be omitted from the program.

Last year, as well as in previous years, too many of those who were on the program failed to appear, and this was true of both essayists and discussants. The printing of abstracts early in *THE JOURNAL* is of especial benefit to the

discussants whose part is or should be quite as important as that of the essayists. Occasionally a discussant is unavoidably absent, but if such a possibility is known beforehand, the committee should be advised early so that some arrangements can be made to secure another discussant, as breaks in the program are very discouraging and demoralizing to the success of the session.

How much greater would be the scientific benefit if some of the social or "loafing" habit could be eliminated at the sessions of our Association! As a rule, medical men ignore social life, but the time devoted to our session is too short, and the opportunity for profit is too great for one to miss anything of the regular scientific program, and visiting and sightseeing invariably detract from the attention that should be given to the scientific work. Our "smoker," now an established custom, should be attended by all, as it furnishes an opportunity to meet and enjoy the company of friends and acquaintances, and this is sufficient social entertainment. The session properly is not a social occasion, but a time for work. Nothing is more delightful than seeing doctors with their wives, where they well know one another, enjoying themselves together in both a professional and social way, but at the annual sessions of our Association it is different, and generally the physician who goes with his wife is sure to either neglect his wife or neglect the meetings.

One of the greatest detriments to the success of our scientific work is the hour of meeting of the House of Delegates on Friday. In addition to the election of officers, there are usually subjects of importance and general interest to be considered, and aside from the delegates, who are usually the most active men in the Association, the Friday morning meeting brings together an audience very much larger than any attending meetings of the sections. In the last few years this has been the death-knell to the scientific program of the last day of the session. Surely, some way should be arranged to avoid such a clash in our program.

Another matter which should be changed or corrected is the manner in which the various reports of the committees are received and adopted. It is quite the rule for the House of Delegates to receive, and some one move the adoption of reports as they are presented, even though very few in attendance have ever read the reports as published in *THE JOURNAL*, or have any knowledge of the contents of the reports or appreciation of their meaning. This

is entirely wrong; first, because such reports represent much hard work and time on the part of the respective chairmen who try to present up-to-date information which shall be of benefit in governing the action of each member of the House; and second, some of the reports, either directly or indirectly, ask for or represent an expenditure of money. While it may be perfectly proper for the House to advise or recommend measures calling for money from the treasury, it is very unsafe to have the money appropriated outright, especially when the reasons for the appropriation are not understood by many. No money should be appropriated or paid out that does not bear the stamp of approval of the Finance Committee of the Council which considers these matters in a more deliberate and judicial manner. The Association has some cash on hand, a part of which may be used to make the sessions of the Association more interesting and instructive, but in the matter of appropriation and expenditures some more definite and economic system than the one at present in use should be adopted, and it should establish the authority of both the House of Delegates and the Council on the question of financial expenditures.

All of the physicians of the state should appreciate *THE JOURNAL*, which is so valuable to any doctor who desires to keep in touch with not only the Association's work, but the general progress of medical affairs. *THE JOURNAL* and the Medical Defense feature are alone worth the membership fee in any county medical society. The style, class and contents of *THE JOURNAL* are equal to any and superior to what is found in the majority of state journals now issued. Our journal is in the front ranks among the few medical journals that are fighting and refusing quack and fake advertisements. It is much better and more deserving of support than many journals of national reputation and patronage, and in its effort to maintain higher ideals it should receive the heartiest support of the profession. One has only to compare the scientific matter, literary style, progressive spirit and clean advertisements of our journal with that of other journals of the same price to quickly learn and convince himself that he cannot afford to be without *THE JOURNAL*, nor can he get one-half as much for his money elsewhere.

The Medical Defense feature of our Association has already proved itself a valuable addition to the benefits derived from membership in the Association. It is hoped that the members will appreciate the necessity of keeping up their

membership so that there will be no question as to the title to benefits afforded by the Medical Defense feature. The members should also remember that when trouble is threatened the matter should be brought promptly to the attention of the Medical Defense Committee.

Finally, every member who is to take part in the LaFayette session should consider that he owes a duty to himself and to the Association in preparing for the work that he is to do and getting at it promptly. The official program and abstracts of papers will be published in *THE JOURNAL* in advance of the session, and this will enable all those who will attend the session to likewise prepare so that in the end the meetings will be most beneficial to all.

A. C. KIMBERLIN.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION

Report of Secretary for the Year 1913

In spite of the fact that the total number of physicians is decreasing and that there are fewer graduates being turned out each year, it is gratifying to note that the membership for the year 1913 shows a gain of 59 members. The credit for this increase is due to the following county secretaries. First, the secretaries of the following counties are entitled to add *Cum Magna Laude* to their official title, as their membership reached the highest point in the last four years:

Vanderburg, Lake, St. Joseph, Delaware, Laporte, Wayne, Floyd, Fountain-Warren, Montgomery, Sullivan, Daviess, Marshall, Parke-Vermillion, Benton, Blackford, Decatur, Jasper, Jefferson, Martin, Orange, Pike and Porter.

The secretaries of the following county societies may add *Cum Laude* in signing their names, as their membership shows an increase over that of last year:

Marion, Vigo, Tippecanoe, Knox, Gibson, Howard, Miami, Clay, Dearborn-Ohio, Boone, Clinton, DeKalb, Harrison, Jennings, Johnson, Monroe, Owen, Posey, Pulaski, Rush, Switzerland, Tipton, Warriek, Washington and Starke.

| | |
|-------------------------------------|-------|
| Membership 1912 | 2,491 |
| Died prior to Jan. 1, 1913..... | 2 |
| Resigned | 3 |
| Expelled | 2 |
| Removed from state..... | 24 |
| Dropped for non-payment of dues.... | 145 |
| New members | 235 |
| Total membership 1913..... | 2,550 |

I wish to add that the complaint which was made against Dr. McGaughey, secretary of the Hancock County Society, in the report which I made to the House of Delegates and printed in the September number of *THE JOURNAL*, is hereby withdrawn. Dr. McGaughey explained that his receiptbook was accidentally destroyed and that he did not know what members had paid him. These members were finally identified, the money paid and their membership cards issued.

FINANCIAL REPORT

The following is the amount of money received by me from secretaries of the different county societies. Dividing this amount by two gives the number of paid up members in each county society for the fiscal year 1913. County secretaries will please notice whether or not this number of members corresponds with their own records, as in the past there has been some confusion in this particular. In addition to this I received \$20 from each of the nine exhibitors at the West Baden meeting, \$180.

| | |
|------------------------|----------|
| Adams | \$ 38.00 |
| Allen | 188.00 |
| Bartholomew | 50.00 |
| Benton | 28.00 |
| Blackford | 34.00 |
| Boone | 32.00 |
| Carroll | 56.00 |
| Cass | 84.00 |
| Clark | 42.00 |
| Clay | 56.00 |
| Clinton | 44.00 |
| Crawford | 18.00 |
| Daviess | 54.00 |
| Dearborn-Ohio | 50.00 |
| Decatur | 36.00 |
| DeKalb | 38.00 |
| Delaware | 104.00 |
| DuBois | 38.00 |
| Elkhart | 106.00 |
| Fayette | 26.00 |
| Floyd | 62.00 |
| Fountain-Warren | 72.00 |
| Franklin | 8.00 |
| Fulton | 28.00 |
| Gibson | 56.00 |
| Grant | 84.00 |
| Greene | 52.00 |
| Hamilton | 40.00 |
| Hancock | 30.00 |
| Harrison | 30.00 |
| Hendricks | 52.00 |
| Henry | 54.00 |
| Howard | 58.00 |
| Huntington | 72.00 |
| Jackson | 50.00 |
| Jasper | 20.00 |
| Jay | 38.00 |
| Jefferson | 38.00 |
| Jennings | 40.00 |
| Johnson | 28.00 |
| Knox | 90.00 |
| Kosciusko | 44.00 |
| LaGrange | 22.00 |
| Lake | 168.00 |
| LaPorte | 100.00 |
| Lawrence | 52.00 |
| Madison | 100.00 |
| Marion | 574.00 |
| Marshall | 50.00 |
| Martin | 28.00 |
| Miami | 60.00 |
| Monroe | 38.00 |
| Montgomery | 72.00 |
| Morgan | 30.00 |
| Noble | 58.00 |
| Orange | 40.00 |
| Owen | 40.00 |
| Parke-Vermillion | 46.00 |
| Perry | 16.00 |
| Pike | 32.00 |
| Porter | 40.00 |
| Posey | 40.00 |
| Pulaski | 10.00 |
| Putnam | 42.00 |
| Randolph | 46.00 |

| | |
|-------------------|--------|
| Ripley | 26.00 |
| Rush | 44.00 |
| St. Joseph | 138.00 |
| Scott | 12.00 |
| Shelby | 36.00 |
| Spencer | 42.00 |
| Sullivan | 72.00 |
| Starke | 14.00 |
| Steuben | 28.00 |
| Switzerland | 18.00 |
| Tippecanoe | 104.00 |
| Tipton | 30.00 |
| Union | 14.00 |
| Vanderburgh | 180.00 |
| Vigo | 186.00 |
| Wabash | 30.00 |
| Warrick | 34.00 |
| Washington | 6.00 |
| Wayne | 108.00 |
| Wells | 52.00 |
| White | 18.00 |
| Whitley | 36.00 |

\$5,100.00

Exhibits 180.00

Total Receipts\$5,280.00

DISBURSEMENTS

The following checks were mailed to Dr. David W. Stevenson, Treasurer:

| | |
|------------------|------------|
| Check | |
| No. 1913 | |
| 32 Feb. 15..... | \$4,006.00 |
| 33 Mar. 4..... | 510.00 |
| 34 Apr. 4..... | 164.00 |
| 35 May 1..... | 104.00 |
| 36 June 7..... | 62.00 |
| 37 July 2..... | 64.00 |
| 38 Aug. 1..... | 14.00 |
| 39 Sept. 15..... | 44.00 |
| 40 Oct. 6..... | 224.00 |
| 41 Oct. 31..... | 26.00 |
| 42 Dec. 31..... | 62.00 |

Total\$5,280.00

CHARLES N. COMBS, Secretary.

Treasurer's Report Indiana State Medical Association

David W. Stevenson, treasurer, in account with the Indiana State Medical Association.

DEBIT

To cash on hand after payment of all outstanding bills for 1912..... \$4289.89

1913

| | |
|---|---------|
| Feb. 7—From secretary for 2,003 members.. | 4006.00 |
| March 16—From secretary for 255 members | 510.00 |
| April 5—From secretary for 82 members.... | 164.00 |
| May 2—From secretary for 52 members.... | 104.00 |
| June 9—From secretary for 31 members.... | 62.00 |
| July 3—From secretary for 32 members.... | 64.00 |
| Aug. 2—From secretary for 7 members.... | 14.00 |
| Sept. 18—From secretary for 22 members.. | 44.00 |
| Oct. 8—From secretary for 22 members.... | 44.00 |
| Oct. 8—From nine exhibitors' booths..... | 180.00 |
| Nov. 1—From secretary for 13 members... | 26.00 |

1914

| | |
|---|-------|
| Jan. 2—From secretary for 31 members..... | 62.00 |
|---|-------|

Total \$9569.89

| CREDIT | | |
|----------------------------------|--------|--------|
| 1913 | | |
| Printers | | |
| Jan. 31—Moore, Langen Co..... | \$ | 5.00 |
| Jan. 31—Viquesney Co. | | 2.00 |
| Feb. 14—Cleary & Bailey..... | 132.05 | |
| March 6—Terre Haute Co..... | 6.25 | |
| April 10—Cleary & Bailey | 6.80 | |
| Aug. 4—Cleary & Bailey..... | 8.75 | |
| Nov. 15—Viquesney Co. | 2.50 | |
| Nov. 15—Whitehead & Hoag Co..... | 20.65 | |
| Nov. 15—Terre Haute Co. | 2.75 | |
| Nov. 15—C. M. Robbins | 27.90 | |
| Dec. 16—Terre Haute Co. | 2.75 | |
| Dec. 16—Viquesney Co. | 22.50 | |
| Total | \$ | 239.90 |

| 1913 | | |
|----------------------------|-----------|--|
| Journal | | |
| Feb. 7—The Journal | \$1502.25 | |
| March 6—The Journal | 191.25 | |
| April 5—The Journal | 61.50 | |
| May 2—The Journal | 39.00 | |
| June 9—The Journal | 23.25 | |
| July 3—The Journal | 24.00 | |
| Aug. 2—The Journal | 5.25 | |
| Sept. 18—The Journal | 16.50 | |
| Oct. 8—The Journal | 16.50 | |
| Nov. 1—The Journal | 9.75 | |
| 1914 | | |
| Jan. 2—The Journal | 23.25 | |
| Total | \$1912.50 | |

| 1913 | | |
|-----------------------------|-----------|--|
| Medical Defense Fund | | |
| April 9—J. R. Eastman | \$1000.00 | |
| April 21—J. R. Eastman..... | 2623.25 | |
| May 2—J. R. Eastman | 39.00 | |
| June 9—J. R. Eastman | 23.25 | |
| July 3—J. R. Eastman..... | 24.00 | |
| Aug. 2—J. R. Eastman | 5.25 | |
| Sept. 19—J. R. Eastman..... | 16.50 | |
| Oct. 8—J. R. Eastman..... | 16.50 | |
| Nov. 1—J. R. Eastman..... | 9.75 | |
| 1914 | | |
| Jan. 2—J. R. Eastman | 23.25 | |
| Total | \$3780.75 | |

| 1913 | | |
|--------------------------------------|--------|--------|
| Councilors | | |
| Oct. 8—W. W. Williams..... | \$ | 12.35 |
| Nov. 15—G. G. Eckhart | 6.25 | |
| Nov. 28—J. H. Weinstein | 7.18 | |
| Dec. 5—G. W. H. Kemper | 11.90 | |
| Dec. 5—W. H. Stemm | 7.50 | |
| Dec. 5—Geo. R. Osborn | 6.40 | |
| Dec. 5—B. Van Sweringen..... | 15.00 | |
| 1914 | | |
| Jan. 3—W. J. Leach | 9.00 | |
| Total | \$ | 75.58 |
| Nov. 15—C. N. Combs, honorarium..... | 300.00 | |
| Total | \$ | 375.58 |

| Stenographers | | |
|-----------------------------|--------|--------|
| Nov. 15—Edith Renking | \$ | 11.70 |
| Dec. 16—Wm. Whitford | 274.34 | |
| Total | \$ | 286.04 |

| Miscellaneous | | |
|--|---------|---------|
| Nov. 15—O. E. Galluo, exp. West Baden meeting | \$ | 3.00 |
| Nov. 15—D. A. Rhinehart, Alburg's drawings | 60.00 | |
| Nov. 15—Chas. N. Combs, secretary..... | 36.71 | |
| Nov. 15—Geo. H. Keiper, Com. on Conservation of Vision | 3.41 | |
| Nov. 15—A. M. A. com. repts. and programs | 27.00 | |
| Nov. 15—Nordyke, Pelvey Co., Committee on Pathology | 39.70 | |
| Nov. 15—Com. on Prevention of Blindness.. | 17.90 | |
| Dec. 5—G. W. H. Kemper, Com. on Necrology | 10.00 | |
| Total | \$ | 197.72 |
| Total | \$ | 6792.49 |
| To balance on hand | 2777.40 | |
| Grand total | \$ | 9569.89 |

Respectfully submitted,
Jan. 7, 1914. DAVID W. STEVENSON.

The following is a list of those who have paid Association dues between Dec. 1, 1913, and Jan. 1, 1914. Errors in name or address should be reported to Secretary Combs, giving number of the membership card in order to facilitate prompt detection of the error on the membership records. This list as published is included on the mailing list of THE JOURNAL, and any member whose name appears on the list and who does not receive his JOURNAL is requested to write for duplicate copy:

- C. W. Gibson, Batesville.....Ripley
- L. L. Gardner, Fort Wayne.....Allen
- A. H. Caffee, Terre Haute.....Vigo
- E. A. Weir, Terre Haute.....Vigo
- W. R. Johnson, Charlottesville.....Hancock
- C. A. Barnes, Greenfield.....Hancock
- E. A. Hawk, Finly.....Hancock
- Paul E. Trees, Maxwell.....Hancock
- Stewart Sloeum, Fortville.....Hancock
- J. W. Thompson, Garrett.....DeKalb
- A. M. Hetherington, Hume-Mansur Building, Indianapolis
- Indianapolis
- Marion
- J. Wm. Wright, Hume-Mansur Building, Indianapolis
- Indianapolis
- Marion

INDIANAPOLIS MEDICAL SOCIETY

Meeting of November 25

Meeting called to order by Dr. Ferguson, at 8:20 o'clock. Number present, 112.

Upon motion, minutes of the preceding meeting were not read.

Application for first reading: Walter English Pennington. For second reading: F. J. Weyerbacher, J. Wm. Wright, and Fred E. Hickson.

Consideration of amendments to Constitution and By-Laws as published in the Society's Bulletin of November 11, 1913.

Motion for adoption of amendment to Article VI of Constitution. Adopted.

Motion for adoption of amendment By-Laws, Chapter 43. Section 4. Adopted.

Motion for adoption of Chapter 4, Section 2, of By-Laws. Adopted.

Dr. Dodds asked Society's endorsement of the sale of Red Cross Christmas seals. Dr. Ferguson, from the chair, requested a written resolution from Dr. Dodds covering his meaning.

Dr. Charlton suggested that there be taken some means to relieve the Society of reading the minutes of the preceding meeting. Reading of minutes each night takes up time that should be given to the program.

Program.—The Society was very fortunate in having present as the guest of Dr. Frank B. Wynn, Dr. Louis B. Wilson, pathologist of the Mayo clinic. Dr. Wilson made a splendid address to the Society on the subject of "Laboratory Efficiency."

Dr. Wilson spoke of two sources of the technical laboratory, general laboratories of physics and chemistry and pathologic laboratory. The general laboratory developed slowly into clinical field of medicine. The teaching laboratories were the first medical laboratories and long remained the standard in this and other countries. Only in last ten years have technical laboratories other than teaching laboratories been recognized. Here a duty is clearly defined into four departments, namely: diagnosis, treatment, research and teaching. The reluctance of the pathologist to make a comprehensive diagnosis without data from his co-workers is recognized because he is relatively without clinical experience. On the other hand, the clinician and surgeon are both apt to be deficient in any similar modesty concerning their lack of pathologic experience. There can be no question but that all the data should be coordinated by the clinician, and there can equally be no question but that the clinician should have a sufficient knowledge of pathologic processes to interpret data supplied by the pathologist. The clinician of today is sadly deficient on laboratory side. One of the greatest factors that makes diagnostic laboratory of today inefficient is presence therein of untrained men.

The untrained pathologist, unguided, is as dangerous to patient as he would be were he similarly unguided in his medical or surgical care. Remedy lies in provision of better trained men and their better remuneration by hospitals. A factor of efficiency is non-medical technician in laboratory. The diener system in America has not always succeeded. The solution is the high school or university girl graduate, probably one who, if not immune to the allurements of marriage, has at least developed considerable resistance thereto. Women are best for routine technical work. It is wise, however, to avoid the lady doctor or nurse. Both have the idea that they have been trained for higher things. The diagnostic laboratory, in close relationship to operating room, is as important as the sterilizing room. No hospital should be permitted to run an operating room in which patients with tumors of doubtful malignancy are operated upon unless it, at the same time, maintains a diagnostic laboratory and a competent pathologist. Schools fail to give sufficiently important knowledge of the important things, by attempting to give general knowledge of the many unusual and unimportant things. It is spread too thinly over a broad field. The pathologist who has a thorough working knowledge of two or three topics is far better to work out for himself alone a similar useful knowledge of other topics, than is the one who has only a general knowledge of a great many things. The teaching of the graduate student in laboratories of America has been sadly neglected. State medical schools must realize their duty to provide for the physicians of the state, opportunity for graduate instruction in laboratory subjects as well as in medicine and surgery. An unfortunate phase in large laboratories is enormous overgrowth of executive

duties. When thrown on the head of the department there is little time for research, though he may be well equipped.

INTERROGATION

Dr. H. R. Alburger: I should like to hear from Dr. Wilson his present attitude toward the reliability of the Wassermann reaction.

Dr. J. V. Reed: Why will we have such a variance of opinion among two or three different pathologists regarding a given specimen? One will say "Positively malignant," another "Suspicious," and the third may say "Doubtful."

Dr. Bernard Erdman: What is significance of frequent association of colon bacillus with other organisms, in the case which clinically represents tuberculosis of kidney, or bladder, and in which case the tubercle bacillus cannot be demonstrated?

Dr. Goethe Link: I should like to know the relationship between the malignant tumor of abdomen and very early appearance of increased abdominal fluid?

Dr. Frank B. Wynn: I wish to ask one question, but first I want to emphasize one or two points in our local condition.

Financial remuneration for laboratory man is not sufficient to attract the good pathologist or to hold the pathologist who has become an efficient worker.

Our public health boards do great work, but it is not true that because of the fact that they do so much work for the people who are well able to pay the private laboratories, that the private laboratory cannot exist? About the only thing left to the private laboratory in this community is the Wassermann reaction, and we cannot help wondering what will become of the Wassermann. If the public health boards take up this reaction and do it free of charge, it will surely force out another colony of young laboratory men who are becoming quite efficient workers.

Are we tending toward state medicine?

Dr. Wilson (closing): We use the antiformin method with the inoculation into guinea-pigs for determination of tubercle bacilli in the urine.

We do not know the relationship between the malignant abdominal tumor and the early occurrence of ascites, and we cannot know it until we know the laws governing growth and recession of pathological cells.

The variance of opinion regarding a given specimen can only be explained by taking into consideration the experience of the pathologist himself. We may know all of the pathology written in the literature, and all that is taught in the schools, and yet be but poor pathologic diagnosticians. The experienced man who has an inherent aptitude for microscopic work will be able to see in a cell or cell group, certain changes which furnish the real basis for his diagnosis, but to save him he cannot describe those differences in scientific language so that the reader can appreciate and see these changes.

In reference to the remarks of Dr. Wynn, I think that we are tending toward state medicine. The state should do this work only in charity cases and then it should have full charge of the case, including the treatment. As it has taken charge of other diseases, I think that it should take up the Wassermann, but it should make a diagnosis in only those cases which it treats throughout the condition.

There is no doubt that the hospitals should have a paid efficient pathologist, just the same as they have a paid anesthetist or an efficient corps of nurses. It must come to this. Hospitals are almost crimin-

ally negligent in not providing for pathological diagnosis while the patient is on the operating table and the surgeon waits.

Adjourned.

ARTHUR E. GUEDEL, Secretary.

CLAY COUNTY

The Clay County Medical Society met in annual session on December 18 at the Davis Hotel, Brazil. After a sumptuous banquet to the members and their wives, Dr. David Ross of Indianapolis, gave an address on "Impressions of London Hospitals and Clinics," and also gave a report of the International Congress of Surgeons held in London last August.

This address was followed by a paper on "Heart Muscles and Heart Sounds," by Dr. Samuel E. Earp of Indianapolis. Dr. Earp advanced some new ideas as to diseased heart muscle being casual factor in many cases of heart-murmur where post-mortem examination showed valves to be entirely competent, and that the lesion was in the myocardium.

Dr. Thornton then presented a paper on "Relations of Health Officers and Physicians."

A free discussion of address and papers.

Report of secretary-treasurer followed, showing balance of \$19.49 in the treasury.

The election of officers for 1914 resulted as follows: President, Dr. M. H. Young, Brazil; vice-president, L. S. Hirt; secretary-treasurer, F. C. Dilley, Brazil; board of censors, J. A. Rawley, Brazil, Wm. Palm, Harmony, J. D. Sourwine, Brazil; delegate to State Medical Association, G. W. Finley, Brazil; alternate, P. H. Veach, Stanton; delegate to Fifth District Medical Society, W. H. Orr, Brazil; alternate, C. C. Sourwine, Brazil; county historian, Felix G. Thornton, Knightsville.

Adjourned.

HARRY ELLIOTT, Secretary.

DELAWARE COUNTY

The regular meeting of the Delaware County Medical Society was held in the Muncie public library December 5, with the president, Dr. W. W. Wadsworth, presiding.

The society had as its guest Prof. H. E. Barnard of the State Laboratory, who told of the great work being done over the state for the general public good. He said in part as follows:

As years go by, and intelligence increases, the breach between the work of the chemist and that of the physician becomes less and less. Modern medicine is coming to be a study of cell chemistry. Laboratories are devoting more time to life processes. When our State Laboratory began its work the main purpose was to detect the adulteration of food products and a great amount of good work was done, but now we have a task of great magnitude and, in many instances, of vastly more importance. In other words, it may mean more to the consumer to know that his food is clean and prepared under sanitary conditions than that it contains no added ingredient. For the dairyman to water his milk is a moral as well as a legal crime, yet watered milk will not kill as many infants as will dirty milk or that coming from diseased cows. I am proud of our sanitary food law of 1909, which places as much importance on dirty food products as on that which is to a certain degree adulterated. Food may be absolutely pure as to ingredients and yet be vile and dangerous.

All butchers, bakers, dairymen, confectioners, butter and cheese makers and others engaged in manufacture or handling of any variety of food stuffs should be cleanly in their habits and free from infectious or loathsome diseases. This is an important matter. The grocer, his clerk and even the driver of the delivery wagon should be inspected by the health officer and pronounced fit for such work before engaging therein.

The five recent epidemics of typhoid fever occurring in Indiana were all due to infected milk, and in each instance had their origin at the sources of the public milk supply. At this point Dr. Barnard told of one dairy farm where there was no milk storage house, one room of the rather small dwelling being utilized for this purpose. When an inspector was visiting this place he was reluctantly admitted to the room and discovered the body of the dairyman's daughter, who had died the day before of typhoid, lying among the milk cans and a part of the day's milk supply. The milk problem is a local one and should be regulated by local inspectors. Every community should have a model milk ordinance. No one should be allowed to sell milk without a license. The fee is no object: proof of fitness is the essential. The dairy must be approved before license is issued, and the plant be subject to repeated inspections. Local slaughter houses may be a source of grave danger. Those not subject to government inspection are likely to be the dumping ground for inferior stock. The professional cattle buyer will not run the risk of sending scrubs or culls to the city stock yards, where they stand a good chance of being condemned, but turns them over to the local butchers who do not have to be so exacting in their requirements. I believe in a municipal abattoir under rigid supervision. Certified meat from large packing houses is preferable to local products not subject to inspection. About 8 per cent. of cattle killed for meat are found tubercular.

A great amount of our time and energies has been devoted to the water supply. Water from public sources is better than that from private wells. In 15,000 examinations over 55 per cent. of water taken from shallow wells was unfit for use and in many instances was nothing but diluted sewage. All private wells should be condemned as soon as a public supply and a sanitary sewer can be installed. By virtue of office all health officers and their deputies should be inspectors and have access to all plants for manufacturing, and storehouses for food. The latest development in pure food work is determination to enforce sanitation and cleanliness.

Dr. H. A. Cowing, who has for twenty-three years been health commissioner for Delaware county, read a paper on "The Progress of Public Health Work," and said in part as follows:

Indiana to-day, largely due to the untiring efforts of Dr. Hurty, is in the front ranks in the struggle for better hygiene. Twenty-three years ago the common fly was a household pet. No accurate record was kept of births and deaths. Contagious diseases were given but little attention. Diphtheria antitoxin was unknown, and the common drinking cup was distributing its millions of bacteria. Dr. Cowing emphasized the importance of the work of the county health officer and outlined the various points which he considered essential in training before a physician is elected to this office.

H. D. FAIR, Secretary.

DUBOIS COUNTY

The Dubois County Medical Society met at Jasper, December 16. The meeting was called to order by President Dr. Louis Lukemeyer, sixteen members being present.

The first order of business was the election of officers for the year 1914, and the old officers were unanimously reelected. They are as follows: President, Louis Lukemeyer, Huntingburg; vice-president, L. B. Johnson, Ireland; secretary-treasurer, E. A. Sturm, Jasper.

The program consisted in the reporting of interesting cases of various members during the past few months, which were interestingly discussed.

A general discussion of medical ethics was held to the edification of all members present.

The next meeting will be held at Huntingburg the third Tuesday in January, with Drs. Lukemeyer and Sturm in charge of the program.

It was resolved by the members present that 1914 should become a rouser year as to numbers in membership and attendance.

Adjourned.

E. A. STURM, Secretary.

ELKHART COUNTY

The Elkhart County Medical Society met in regular session December 4 and elected the following officers for 1914: President, Elmer E. Ash, Goshen; vice-president, H. J. Defrees, Nappanee; secretary-treasurer, J. A. Work, Jr., Elkhart; censor 1914-16, B. F. Kuhn, Elkhart.

Dr. H. R. Alburger of Indianapolis, presented the subject "The Modern Concept of Nephritis." This lecture was illustrated by lantern slides and charts.

Adjourned.

J. A. WORK, JR., Secretary.

JEFFERSON COUNTY

December 10

The Jefferson County Medical Society met in regular session December 10, with ten members present.

The minutes of the last meeting read and approved, after which Dr. F. H. Austin presented a paper on "Diagnosis of Gastro-Intestinal Diseases."

Drs. Oscar A. Turner, E. P. Busse and F. F. Thompson were elected to membership; Dr. Busse being transferred from Vanderburg County and Dr. Thompson from Wayne County.

Adjourned.

F. C. DENNY, Secretary.

December 17

The Jefferson County Medical Society held their regular business meeting and elected the following officers for 1914: President, H. S. Hatch; vice-president, A. P. Harrison; secretary-treasurer, F. C. Denny; censor, E. C. Totten.

Reported dues paid in full with the exception of three members.

Adjourned to meet second Wednesday in January.

F. C. DENNY, Secretary.

LAKE COUNTY

The annual meeting of the Lake County Medical Society was held at the Hammond Country Club Tuesday, December 9, with 31 members present. The members and their families were the guests of President and Mrs. Weis.

A well-appointed dinner was served at 7 p. m., there being about one hundred plates. During the

dinner several members and ladies entered a story-telling contest—the stories relating to the profession.

Annual election of officers resulted as follows: President, J. W. Iddings, Lowell; vice-president, J. E. Metcalfe, Gary; secretary-treasurer, E. M. Shanklin, Hammond; censor, T. W. Oberlin, Hammond; delegates, E. E. Evans and H. E. Sharrer, alternates, J. E. Metcalfe and W. F. Howat. Essayist for September (Oration in Medicine), C. W. Yarrington, Gary.

On motion it was decided to continue the plan of the past two years—holding the first six meetings in Gary and the last six in Hammond.

The secretary presented his annual report, a summary of which follows:

| | |
|--------------------------|----|
| Meetings held | 11 |
| Average attendance | 16 |
| Papers read | 9 |
| Case reports | 16 |
| Bulletins issued | 11 |
| Journal reports | 11 |
| Councilor visits | 0 |
| Gross membership | 85 |

After the business had been transacted the party retired to the main lounging room of the club where an enjoyable musical and literary program was presented.

Adjourned.

E. M. SHANKLIN, Secretary.

MADISON COUNTY

The Madison County Medical Society met in regular session in the Public Library in Anderson Tuesday, Dec. 30, 1913, at 4 p. m. President M. A. Austin in the chair. There were 24 members present and every member paid his dues for 1914. The minutes of previous meeting read and approved. Application of Dr. J. H. Lail was reported favorably by board of censors.

The society proceeded to election of officers for ensuing year which resulted as follows: President, Dr. S. C. Newlin, Anderson; vice-president, Dr. L. F. Schmaus, Alexandria; secretary-treasurer, E. T. Charles, Alexandria; censor, T. M. Jones, Anderson. Then followed the president's address: "Any Old Thing or a New Thing or Two." This was a resumé of the doctor's professional career from the beginning of his practice until the close of the same, showing why some succeed and also why others fail, illustrating in a masterly manner the road that leads to success.

Adjourned.

ETTA CHARLES, Secretary.

PIKE COUNTY

The Pike County Medical Society met at the office of Dr. T. R. Rice December 11. Minutes of the previous meeting read and approved.

Officers for 1914 were elected as follows: President, S. R. Clark; vice-president, W. J. Bethel; secretary-treasurer, E. S. Imel; censors, Drs. Ireland, Rice and Basinger; delegate to state meeting, Dr. Clarence Abbott; alternate, L. R. Miller.

The society gave a vote of thanks to Dr. Abbott for his untiring efforts of the past two years as president of the society to aid in its increased membership.

Dr. T. R. Rice gave a very interesting and instructive talk, presenting a patient in clinic for psoriasis. The case was very typical and of much value to the society.

Adjourned.

E. S. IMEL, Secretary.

PUTNAM COUNTY

The Putnam County Medical Society held its regular meeting in Greencastle the evening of December 9.

Dr. C. L. Amick of Fillmore, presented a paper on Gonorrhea and the present day treatment, giving his treatment and successes. The paper elicited a full and very interesting discussion of the subject.

Officers for 1914 were elected as follows: President, W. M. McGaughey; vice-president, C. L. Amick; secretary-treasurer, E. Hawkins; censors, Drs. King, Tucker and Gillespie.

Adjourned. E. HAWKINS, Secretary.

SULLIVAN COUNTY

The Sullivan County Medical Society met at the Christian Church in Farmersburg, Wednesday evening, December 3, with President Neff in the chair. There were 14 members present.

The secretary read the following report of the year's work: Total membership, 36; new members, 6; suspended for non-payment of dues, 1; moved away, 3; retired, 1; net gain, 1; number of meetings, 11; largest attendance, 18; lowest attendance, 7; average attendance, 13.5 plus; papers read, 23; failure to prepare papers, 2; cases reported, 5; Journal reports, 4; public meetings, 1; number of papers read before other societies by members of this society, 5; publications, Annual Bulletin and four articles by members in other publications; contributions to medical section of the Public Library, 16 vols.; councilor's visits, 1; visitors, 17; those present 11 times, Neff, Billman, Maple; 10 times, Wwork, Briggs; 9 times, Scott, Crowder; 8 times, Thompson; 7 times, Kennedy; 5 times, Van Cleave, Corbin; 4 times, Oliphant, Higbee; 3 times, Douglas, Robards, Dukes, Deputy, Whipps, Bailey; 2 times, Thralls, Bland, Gill, Freeman, Pirtle, Lowder, Asbury, Miles, Robbins, Walters; 1 time, Bedwell, Parker, Boone; no time, W. A. Lisman, J. W. Lisman, Durham and Hadley.

The following officers were elected for 1914: Dr. R. H. Van Cleave, president; Dr. J. M. Billman, vice-president and Dr. J. B. Maple secretary-treasurer.

The meeting then adjourned to the dining-room where a most excellent dinner was served after which the society reconvened to listen to the evening's program.

Dr. R. H. Van Cleave read a paper on Prevention of Tuberculosis. He believes that we can only reach a stage of prevention by a campaign of education both of the patients and their care-takers. He advocates a state tax to support inspectors and social workers to correct bad surroundings in the home and places of work, to teach proper care of the body both in sickness and health and to reach out and help that vast bulk of the tubercular population that is not only ignorant but is unable financially to care for themselves. No doctor, nor any county society can reach this problem, it must be done by the state and in an adequate way. Discussion was general.

Dr. J. R. Crowder read a paper entitled "Should Sex Hygiene Be Taught in the Public Schools?" He advocated teaching of the biological side of the question in the grades below the age of puberty; at the time of puberty or shortly thereafter the matter should be explained more fully and the question of masturbation discussed. Shortly before graduation venereal diseases should be handled thoroughly. All other matters pertaining to sex are personal and

should be met later by personal confidential talks with one's physician. Discussion general. Society adjourned.

J. B. MAPLE, Secretary.

WAYNE COUNTY

The Wayne County Medical Society met in regular session December 3, electing the following officers for 1914: President, C. E. McKee; vice-president, F. W. Kruefer; secretary, A. J. Whallon; treasurer, G. B. Hunt; censors, J. N. Study, L. F. Ross, A. L. Bramkamp.

Adjourned.

A. J. WHALLON, Secretary.

THE TRUTH ABOUT MEDICINES

RELIABLE MEDICINES

Since publication of New and Non-Official Remedies, 1913, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Non-Official Remedies":

DIGIPOTEN.—Digipoten consists of the digitalis glucosides in soluble form, diluted with milk sugar to give it a strength equal to that of digitalis of good quality. Digipoten is adjusted by the frog and guinea-pig methods to have a strength of 1,400 heart tonic units and by chemical assay to contain from 0.3 to 0.4 per cent. digitoxin. The action, uses and dosage of digipoten are the same as those of digitalis. It is sold in the form of a powder, which is soluble in water, and as Digipoten Tablets, each containing 0.03 gm. The Abbott Alkaloidal Co., Chicago, Ill. (*Jour. A. M. A.*, Dec. 6, 1913, p. 2069).

TANNIGEN TABLETS.—Each tablet contains tannigen (see N. N. R., 1913) 0.5 gm. The Bayer Co., New York City (*Jour. Dec. 6, 1913, p. 2069*).

BORDET-GENGOU BACILLUS VACCINE FOR WHOOPING-COUGH PROPHYLAXIS.—Greeley Laboratories, Inc., New York.

BORDET-GENGOU BACILLUS VACCINE FOR WHOOPING-COUGH THERAPY.—This vaccine is believed to be of service in the prevention and also in the treatment of whooping-cough. Greeley Laboratories, Inc., New York City (*Jour. A. M. A.*, Dec. 13, 1913, p. 2158).

CULTURE OF BACILLUS BULGARICUS, FAIRCHILD.—A liquid culture of the Bacillus Bulgaricus. The culture is sold in packages containing six and thirty vials, respectively. The culture is used internally in the treatment of intestinal putrefactive diseases and as an application to body cavities in the treatment of suppurative conditions. Fairchild Bros. & Foster, New York (*Jour. A. M. A.*, Dec. 13, 1913, p. 2158).

SLEE'S ANTIMENINGITIS SERUM.—For description of Antimeningococcus Serum see N. N. R., 1913, p. 215. The Abbott Alkaloidal Co., Chicago.

SLEE'S ANTISTREPTOCOCCIC SERUM.—For description of Antistreptococcus Serum see N. N. R., 1913, p. 216. The Abbott Alkaloidal Co., Chicago (*Jour. A. M. A.*, Dec. 20, 1913, p. 2242).

REFORM IN MEDICINES

PULMONOL.—Pulmonol is a consumption "cure" put out by the Pulmonol Chemical Co., New York. As always in the case of consumption "cures," the testimonials issued may be divided into two classes, those who really had tuberculosis and those who did not have it. Investigation of some of the testimonials given some time ago, generally show that those who

relied on the nostrum are dead while those who got well, never had tuberculosis. Examination in the A. M. A. Chemical Laboratory indicated that each fluidounce of Pulmonol was approximately equivalent to 29 gr. of potassium guaiacol sulphate, 10 gr. of sodium benzoate and 1/24 gr. of strychnin sulphate (*Jour. A. M. A.*, Nov. 29, 1913, p. 1998).

LACTIC ACID FERMENT PREPARATIONS in *N. N. R.*—Assertions that the lactic ferment preparations on the market are worthless caused the Council on Pharmacy and Chemistry to examine those admitted to *N. N. R.* While past examinations showed this class of preparations to be most unreliable, the present market supply was found to be satisfactory. The products examined were Fairchild Culture of *Bacillus Bulgaricus*, lactic bacillary tablets, Fairchild; lactampoules, Fairchild; bacillary milk, Fairchild; bulgara tablets, H. W. Co.; massolin, Schieffelin (*Jour. A. M. A.*, Dec. 6, 1913, p. 2084).

SANATOGEN.—The fundamental objection to Sanatogen is not its outrageously high price, but the attempt to ascribe to a mixture of casein and glycerophosphate powers not possessed by these ingredients. The claim that Sanatogen is a "nerve food" is an absurdity as is any claim that the casein in Sanatogen has a greater food value than the casein in ordinary milk. Physicians who have given fulsome puffs for Sanatogen are invited to study the claims which are made for it—the following being one ". . . it revivifies the nerves, promoting sleep and helping digestion . . ." (*Jour. A. M. A.*, Dec. 6, 1913, p. 2085).

THE VALUE OF ECHINACEA.—While most extravagant claims are made for the drug, the Council on Pharmacy and Chemistry concludes that, on the basis of the available evidence, echinacea is not entitled to be described in New and Nonofficial Remedies as a drug of probable value (*Jour. A. M. A.*, Dec. 6, 1913, p. 2088).

TEXAS GUINAN.—The Texas Guinan World-Famed Treatment for Corpulency (Texas Guinan Co., Los Angeles, Cal.) appears to be the latest venture of W. C. Cunningham, of Marjorie Hamilton's Obesity Cure fame. It is exploited by follow-up letters giving the experiences of Texas Guinan, an actress, and offering the preparation at a sliding scale of prices, ranging from twenty down to three dollars. From an analysis made in the A. M. A. Chemical Laboratory it appears that an essentially similar preparation may be obtained by mixing one pound of powdered alum with ten ounces of alcohol and enough water to make one quart. A second specimen which was examined in the association's laboratory contained no alum or alcohol and appeared to be a tragacanth preparation of the "vanishing lotion" type (*Jour. A. M. A.*, Dec. 13, 1913, p. 2173).

COLLOIDAL PALLADIUM.—A preparation of colloidal palladium, under the proprietary name Leptynol, is proposed as a means of causing the absorption of adipose tissue. The preparation appears one of the many thousand proprietaries produced abroad in the past year and put on the market after meager experimental work (*Jour. A. M. A.*, Dec. 13, 1913, p. 2179).

DOWD'S PHOSPHATOMETER.—According to its inventor this is a device "for taking the phosphatic index or pulse of the nervous system." Its originator, Dr. J. Henry Dowd, M.D., Buffalo, N. Y., writes enthusiastically of his instrument and of "Comp. Phosphorus Tonic." The phosphatometer is a scientific absurdity which pretends to determine the amount of phosphate in the urine and thus to measure "nerve metabolism" (*Jour. A. M. A.*, Dec. 20, 1913, p. 2258).

ANOTHER "CANCER CURE".—Denver newspapers advertise that the International Skin and Cancer Institute of Denver claims to have a cure for cancer. The "cure" is exploited by one John D. Alkire. No doubt those afflicted with cancer, and those who believe themselves afflicted with cancer, will flock to Denver for

the "cure." The actual victims of the disease will of course die, but there will be the usual number of recoveries from non-malignant sores that will be heralded as "cures" and thus will make the venture a profitable one. To the honor of Denver it may be said that some of its newspapers refused the advertisement (*Jour. A. M. A.*, Dec. 20, 1913, p. 2248).

THE READY RECKONER.—The attempt of a proprietary exploiter to pose as the physician's postgraduate instructor comes from the promoter of a "blood-stimulating" preparation—Hemaboloids Arseniated (with Strychnia). It is in the form of a ready reckoner for the diagnosis of pathologic sputum. The thing consists of a revolving arrow, surrounded by circles containing illustrations of bacteria such as no human eye ever saw through a microscope. The physician apparently is expected to point the arrow to what he sees, or thinks he sees, in the microscope and then, through a window in the tail of the arrow, observe the name of the organism and the disease which it produces. The device is an insult to intelligent physicians and belongs in the waste-basket (*Jour. A. M. A.*, Dec. 27, 1913, p. 2506).

PA-PAY-ANS (BELL).—An analysis, included with the report of the Council on Pharmacy and Chemistry rejecting the product, failed to find one of the constituents claimed to be present in the preparation—the constituent after which the medicine appears to have been named, namely papain (*Jour. A. M. A.*, Dec. 27, 1913, p. 2314).

BOOK REVIEWS

COLLECTED PAPERS. By the staff of St. Mary's Hospital, Mayo Clinic, Rochester, Minn., 1912. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, pp. 842. Price, \$5.50 net.

This volume is of necessity more complete than usual in that it is made to include papers written and presented to various medical journals for publication.

In the wealth of material presented in this book, one is lost in any attempt to select those things of most interest and import. From the excellent papers on the various phases of abdominal surgery, goiter, kidney lesions, etc., to Wilson's excellent resumé on postoperative embolism, the whole work is teeming with interesting points that are tersely emphasized and statistics that have been garnered from an unparalleled source of material. No surgical library can afford to be without a complete file of these reports.

BLOOD-PRESSURE. From Clinical Standpoint. By Francis Ashley Faught, M.D., of the Medico-Chirurgical College, Philadelphia. Octavo of 281 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1913. Price, \$3.00 net.

There has, for some time, been need for just such a work as this of Dr. Faught's. The use of the sphygmomanometer has now become sufficiently general to warrant the publication of a condensed work devoted solely to the principles underlying blood-pressure, the various forms of apparatus employed in its determination, the clinical aspects of blood-pressure in relation to health and disease and an epitome of the literature bearing upon the subject. All this and much more Dr. Faught has accomplished in his monograph and with a few exceptions the work has been well done. The arrangement and print are such as to make the book most readable, but unfortunately there are many typographical errors, as for instance the word "bacterial" is used for "brachial" twice on page 17. Again, many sentences are incomplete and not a few errors in punctuation find place. Undoubtedly subsequent editions will correct these errata.





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ORIGINAL ARTICLES

CANCER PROPHYLAXIS

M. N. HADLEY, M.D.

Associate in Clinical Surgery, Indiana University School of Medicine

INDIANAPOLIS

The science of medicine has two definite purposes to serve humanity: first, the prevention, and second, the cure of disease. The first of these functions—the prevention of disease—has in the aggregate yielded greater benefits to the race than have been accomplished by efforts to cure disease. Preventive medicine has been the natural outgrowth of a desire, both on the part of the profession and the public, to get the greatest benefit from the knowledge which scientific investigation has yielded.

Every disease whose specific etiology we know has been intelligently and effectively attacked through the agencies of prophylaxis, but the specific etiology of cancer is not known, with the result that but little serious attention has been paid to its prevention. With all of our labors directed toward the cure of cancer and none, or very little, toward its prevention, what have we accomplished? Our efforts to cure cancer have been made largely in two directions: first, an earlier diagnosis, and second, an improved and more radical surgical technic. An earlier diagnosis propaganda has been actively prosecuted many years, and yet there is much evidence to show that there is some fundamental weakness in the belief that an early diagnosis of cancer will yield greatly improved results in its treatment.

What is this fundamental error which has robbed the profession of its great hope in the fight against cancer? The failure it would seem has arisen because we have not appreciated what constitutes an early diagnosis. The profession

has been taught to look for tumor formation, certain subjective symptoms resulting from disturbed function, and for enlarged regional lymph-nodes. These are the findings, not of early, incipient, localized, curable cancer, but of the complications of cancer.

We have long passed the time when we looked on peritonitis as a symptom of appendicitis. We view it rightly as a complication. The sequence of pathologic events in the case of appendicitis follow with tragic rapidity, and we all know that the great danger lies not in the original disease, but in delay of its rational treatment.

Extensive infiltration with tumor formation, enlarged regional lymph-nodes, should not be regarded as symptoms of cancer but as complications. As a result of this erroneous conception of the early symptoms of cancer, every so-called early diagnosis has been a late diagnosis, which accounts for the statistics of Frankl, who states that cancer of the cervix in 1,000 cases in Schauta's clinic in Vienna was in an incipient, that is, strictly localized stage in only thirty-four instances, 0.03 of 1 per cent., 1901 to 1912. This error, therefore, accounts in large measure for the failure to bring cancer patients to the surgeon when the disease is in an operable stage.

The only method by which an incipient, strictly localized curable cancer can be diagnosed is by the aid of the microscope. We cannot escape the conviction that any diagnosis made by methods other than the microscope is necessarily a late diagnosis. If this were clearly recognized, then the profession would quit looking for the complications of cancer on which to make a diagnosis, more lives would be saved, less major and more minor surgery done to effect a cure. Too much emphasis cannot be made on the fact that cancer in its early curable stage cannot be diagnosed by the usual methods of history, clinical symptoms and physical findings. This view brings up the question of the total inadequacy

of our equipment for the diagnosis of curable cancer. It is not possible, nor should it be expected, that the average practitioner be an expert microscopist. There should be a man in every county of the state, under the direction and control of the Board of Health, and paid by the state, who had been trained in the use of the microscope and who would be readily accessible to all the physicians of the county. This would immediately put within easy reach of every physician in the state a competent pathologist whose assistance would be invaluable, and is absolutely necessary if the diagnosis of curable cancer is to be made.

The second line of effort in the cure of cancer, an improved and more radical surgical technic, has about reached the limits of its service. Surgery has thrown itself into the fight, conscious of its right and sure of its ground, cutting and ablating to the point of mutilation, with an enthusiasm that is almost vicious in its desperation to circumvent the last outlying nest of cancer cells. It is now somewhat of a question whether you dissect the new growth with infected tissue away from the patient or the patient away from the new growth. The wide fascial dissections in cancer of the breast, based on Handley's findings of the routes of dissemination, the radical removal of retroperitoneal connective-tissue and gland-bearing fascia practiced by Wertheim in cancer of the cervix uteri, very closely approached the margin of safety, past which the surgeon dare not go. When reliable statistics are analyzed, they demonstrate that the vast majority of surgery directed to the cure of cancer is a failure. The percentage of operability on the part of conservative surgeons is small, the primary mortality is relatively high and the percentage of ultimate cures is very small. The dominant note of surgeons who have followed their own patients for five and ten years, and are therefore the only ones whose opinions are of value on this subject, is a gloomy one.

With a totally inadequate diagnostic equipment, the greatest burden of cancer treatment has been placed on surgery. Recognizing this burden, surgery has responded with its utmost resources and with here and there a ray of hope, but in the main results have been most discouraging. Let it not be understood that I am opposed to the surgical treatment of cancer, for it is clearly appreciated that there is always the possibility of removing all of the infected tissues, or at least enough that the body-cells may take care of what remains, and thereby effect a cure. But it is of importance that we occasionally make an invoice, strike a balance and see if our accounts will justify a therapeutic method.

My conclusion is, that recognizing the great difficulties in the diagnosis of early, localized curable cancer, that there is a small percentage of cures by any method, when that cure is directed toward a complicated cancer, the kind largely coming for treatment; and further, that cancer is actually or relatively on the increase, there exists urgent necessity of shifting the fight from the field of curative medicine to that of preventive medicine.

Is it possible without knowledge of the specific etiology of cancer to entertain seriously a discussion of its prophylaxis? Jenner, without knowledge of the specific etiology of small-pox, by utilizing the facts of a shrewd observation, introduced a principle of prophylaxis that has almost eliminated that disease. The basis on which cancer prophylaxis is possible is that cancer does not develop in normal tissue; that there is present, antedating the development of malignancy, a lesion which may be termed a precancerous lesion and which in no sense is either histologically or biologically malignant, and yet bears a most important and vital relationship to the subsequent development of malignancy of some type in the cells associated with this lesion.

Bloodgood says that cancer of the skin never begins in a normal skin, that there is always some preexisting alteration in the tissues of the skin, such as warts, moles, simple ulcers, burns or scars. This statement is made after close scrutiny of the histories of a large series of skin cancers, and to my mind is an observation of great importance. Skin lesions are under the easy observation of both the patient and physician, so that it is possible to get complete data of the life history of such lesions, and if such data does demonstrate universally the existence of precancerous alterations in the tissue antedating the development of skin cancer, it would be a strong presumptive argument that such precancerous conditions also exist in those tissues deeply placed, and without the range of visual observation, such as the gastro-intestinal tract, uterine and bones.

Coley is a strong advocate of the rôle which trauma plays in the later development of sarcoma, especially osteosarcoma. Wilson and McCarty have shown that 50 per cent. of gastric carcinoma begins on a simple ulcer base. It is a rather common observation by a great many busy practitioners of medicine that malignant cases will give a history of a lesion or injury to the tissues prior to the development of cancer, such as bone injury, a bruised testicle, a wart, mole or an old ulcer. The beetle-nut chewers of India, the workers in pitch factories in Eng-

land, the pipe smoker, the chimneysweep and many others afford unimpeachable evidence that there is a definite relationship between certain types of tissue hyperplasia benign in character and malignant new growths. There exists a great mass of reliable evidence all pointing to one fact: that in a study of the life history of a malignant new growth its genesis must be looked for in marked tissue changes before the growth has become cancerous. This, then, is the basis on which the principles of preventive medicine must be applied in the fight against cancer. The precancerous lesion must be studied, sought for and eliminated.

When an attempt is made to classify the lesions which clinical observation has shown to be premalignant in character, there is apparently no similarity in their pathology. They embrace such widely dissimilar conditions as those produced by sudden trauma, and the slowly developing benign tumor, such as senile parenchymatous hypertrophy of the mammary gland, a tumor known to be potentially malignant.

What possible relationship exists in the character of the changes which take place in the cell, or group of cells, the recipient of a sudden trauma, which initiates these cells into the rôle of a malignant neoplasm, and the changes which take place in the glandular cells of the breast during the development of senile parenchymatous hypertrophy? An answer to this question is purely speculative, and therefore foreign to the intent of this paper, yet a suggestion as to the real identity of the factors operating in these two clinically widely dissimilar premalignant lesions would greatly assist in formulating a working hypothesis on which to classify such lesions, and thereby learn to recognize them. This suggestion may be found in the subtle changes which take place in the cell as the body advances through maturity to senility. The nature of these changes are perhaps not well understood, but one only has to compare the skin of a very few infants with an equal number of adults to observe the tendency to abnormal cell proliferation in the adults. The skin of the infant is smooth and velvety, while only few adults reach the age of 40 without evidence of abnormal cell proliferation, as shown by the presence of warts, moles, subepithelial nodules, lipomas, etc.

Any individual cell, or group of cells, may undergo the biologic changes consequent on old age prematurely. They may be aged suddenly, as by a single trauma, or more slowly, as by chronic irritation or benign tumor hyperplasia. Any local influence which results in frequent cell proliferation to meet the indications for the repair

of the injured tissues, brings about cell changes, which essentially are the changes normal to old age, and it is such cells that malignancy is prone to develop.

One must not forget in a consideration of the tumor problem, that the cell is the unit of all organic life; that the individual has his existence as a result of a high degree of differentiation as to form and function of these cell units, which, while subservient to the interests of the whole body, yet maintain a physiologic independence under proper conditions of nutrition. It is therefore necessary to take into consideration the life history of the cell, and recognize that it individually undergoes chemical, biologic, physiologic and nutritive changes, wholly independent of the organism as a whole, and these changed and altered cells brought about as the result of trauma, continued irritation, either mechanical or infectious, make a fertile field for the development of malignancy.

With this conception in view, our attitude toward trauma, chronic irritation and benign tissue hyperplasia must be extended so that we include among other sequelae of these lesions, the development of malignant neoplasms. The very wide acceptance of the theory of Cohnheim as to the etiology of cancer, while not proved, has profoundly impressed the medical mind that any lesion which is definitely cancerous has resulted from embryologic defects. Enough clinical observation is at hand to disprove this theory, and its teaching should be discontinued in the interest of a more hopeful interpretation of observed facts, and if a theory is necessary, one substituted that will lend itself to cancer prophylaxis. There has been a radical change of medical thought in recent years on the question of premalignant lesions. It was taught that even though patients give a clear history of injury or insult to the tissues of some type prior to development of malignancy, it was merely coincidental, and all causal relationship denied. The painstaking clinical observations of Bloodgood and Coley have had much to do with this change. It is not only reflected in current medical literature, but the courts have recognized the validity of claims for damages in suits based on the causal relation of injury to cancer. The supreme court of at least one state, that of South Carolina, has ruled on a case involving this point, recognizing such a relationship.

How can the principles of cancer prophylaxis be applied by the average practitioner? I say average practitioner, because in his hands to-day rests the fate of the cancer patient. It might be objected that such a program contemplates

the removal of every tissue defect discoverable. That, indeed, would be an ideal, and if carried out would almost eliminate cancer; but practically it does not contemplate such a universal removal of tissue defects. We know the most frequent sites of cancer, which are: lip, pylorus, breast, cervix and rectum. We also know that cancer is distinctly a disease of adult life. It therefore follows that every adult individual who presents himself with symptoms referable to any one of these organs has flaunted a red flag in the physician's face, and that flag means danger.

It is right at this point that the deep responsibility of the profession begins. The issues that determine the fate of the cancer patient are apt to be solved at the first consultation. The first question to be answered referable to diseases of these organs is, "Is this a premalignant lesion?" If it is a subepithelial nodule of the lower lip following chronic irritation, or a scaly patch at the mucocutaneous junction, it is a precancerous lesion; if it is a chronic pyloric ulcer or gallstones, it is potentially malignant; if it is a nodule in the breast, it possibly may be already malignant, it surely is precancerous; if it be an eroded lacerated cervix or a fissured rectal mucous membrane, it can easily be the genesis of a later cancer.

With this mental attitude toward diseases of these organs, the conscientious physician will not be satisfied until they are cured. It is folly to wait for the clinical signs and physical findings of cancer in diseases of these organs before resorting to surgical therapy, if need be, to effect a cure. If one waits until the clinical signs of cancer are present, then the surgeon must deal with a complicated cancer, and in a vast majority of instances a cure is impossible. Such scrutiny of lesions of this group of organs would greatly reduce the number of cancer cases, and thereby lessen the mortality from this disease. A like scrutiny of Roentgen-ray burns, old scars, pigmented moles, warts which ulcerate, would bring these lesions to the surgeon at a time when they are curable and prevent the development of a great many skin cancers.

As an illustration of the subject under discussion, the following case which presented itself during the preparation of this paper, strikingly illustrates the great need and at the same time the possibilities of the application of the principles of preventive medicine to the treatment of cancer:

Patient.—Mr. S., railway postal clerk, aged 46, complained of an unhealed ulcer of four months' duration, at mucocutaneous junction of lower lip, midway between angle of mouth and center of lip.

Past History.—Eighteen years ago had a luetic infection for which he took a thorough course of treatment. Three years later began smoking a pipe, and soon after noticed a slight thickening of tissues at vermillion border of lip, which he described as a callus. He quit smoking the pipe, but the callus did not disappear. There was no soreness nor any irritation of any kind at this point for fifteen years, or until March, 1913, when the epithelium desquamated and scaled off the callus. The epithelium was intact under the desquamated scale. About one month later an ulcer appeared at this site. In May he consulted his physician, who after the history of lues had been obtained, gave him salvarsan, and directed that he take potassium iodid and mercury, which he did for two weeks. This resulted in no improvement in the local lesion. I saw the patient at this time. The ulcer was 1 cm. in diameter, located just at the junction of mucous membrane and skin, about midway between the angle of mouth and center of lower lip. The base of the ulcer was covered with pale granulation tissue, the edges were smooth and regular. The tissues of the lip in the region of the ulcer were soft and pliable everywhere except a nodule of indurated tissue beneath the mucous membrane, adjacent to the outer border of the ulcer. There were no enlarged lymph-nodes.

He was advised that the lesion was probably an epithelioma and that it should be treated surgically. As he had been told of the possibilities of the lesion being luetic, he preferred further medical treatment, and two more doses of salvarsan were given without effect. He then submitted to operation, which was done two months after his first visit to his physician. The operation consisted, first, in a dissection of the submental and left submaxillary group of lymph-nodes with intervening subcutaneous fascia and fat. A V section of lip, which in width embraced half of the vermillion border of the ulcer area and extending downward to the inferior maxillary edge, was removed. The diagnosis was spinal carcinoma.

Here is a case that flaunted a red flag for fifteen years with no one to heed the signal. Here we have the life history of a spinal-celled carcinoma, and for fifteen years it was a benign tissue hyperplasia of some type, due to chronic irritation. This is the type of case amenable to cancer prophylaxis—abnormal tissue growth following repeated irritation at a favorite cancer site. The lesion should have been excised before there was any question of malignancy, the indication for excision being a premalignant lesion. Illustrative of this type of lesion is the following case:

Patient.—Mr. H., aged 66, a banker; past history negative; has never used tobacco in any form.

Six years ago noticed a slight irritation on lower lip at vermillion border. This irritation was exactly at the point where he touched his index finger to his lip, to enable him to count currency, a habit which he had followed for many years. There was a slight thickening of the tissue which lasted a year or more, when the epithelium scaled off and left a very small ulcer. An attempt was made to cure this ulcer by application of ointment, which failed. Within a month after the appearance of the ulcer he consulted a surgeon, who under local anesthesia excised the ulcer. Healing occurred promptly, and there has been no evidence of recurrence four years after the operation. While it would be a violation of scientific procedure to classify such a lesion as premalignant, for we have no proof that it ever would have become malignant, yet following a history of continued trauma, at a cancer site, it is not unfair to assume that a cancer would have developed had not the lesion been cured.

The profession justly criticizes the physician who refuses to advise surgery in appendicitis in the early localized curable stage of this disease, but waits until the complication of peritonitis has arisen before advising surgery. And yet, is not such a situation quite parallel to many cases of cancer? May we not hope that the time is near at hand when it will be quite as much a matter of criticism for a physician to neglect premalignant lesions at cancer sites until they have become complicated by malignancy, as it is for him to neglect the golden hour in the treatment of appendicitis?

CONCLUSIONS

1. Prophylaxis is a far more efficient method of conserving human health than any kind of therapy.

2. All therapy directed to the cure of cancer in the vast majority of cases has proved a failure, despite the fact that every cancer at some time in its history is easily curable.

3. The difficulty arises in the diagnosis, which cannot be made in the early, localized curable stage of this disease, by the ordinary methods in use. This fact accounts for the failure of surgery to greatly reduce cancer mortality.

4. Clinical observation has shown that the life history of most cancers shows alterations in the tissue antedating the development of malignancy, and the plain teaching follows that such alterations in known cancer sites should be attacked surgically before malignancy develops. Such a course would constitute an efficient cancer prophylaxis.

MANNER OF GROWTH AND SURGICAL TREATMENT OF CANCER OF THE BREAST

W. D. GATCH, M.D.

INDIANAPOLIS

Cancer of the breast has been more thoroughly studied than any other malignant condition. The very name of cancer comes from a fancied resemblance of certain mammary growths to a crab. Cancer of the breast was the first of such conditions to be attacked surgically with a fair degree of success. It was here that the principles on which the radical extirpation of cancer in any situation are founded were first worked out. A thorough knowledge of the manner of growth of mammary cancer enables the student to understand not only the surgical treatment of this condition, but of cancer in any other situation as well. We can approach our subject most conveniently by a brief historical account of the development of our present knowledge.

Up to the time of the introduction of the study of cellular pathology by Virchow, very fanciful ideas of the nature of malignant growths were entertained. Some of the older writers regarded them as parasites of external origin which fasten on the human body and devour it. The most generally accepted idea was that they arise from some morbid condition of the blood. The study of cellular pathology, however, showed that these growths consist of elements which differ but slightly from the normal elements of the body, and that the destructive nature of such neoplasms depends on the multiplication and dissemination of these elements without relation to any useful end.

Virchow distinguished between sarcoma and carcinoma, but regarded the latter as arising by a metaplasia of connective-tissue cells into epithelial cells. He supposed that as a cancer grows more and more, connective-tissue cells undergo this change. Thiersch, Waldeyer, Hansen and others¹ demonstrated that all carcinomata arise from epithelial cells, and that the local growth and metastases of a cancer are produced by the multiplication of its own cells.

It is evident that the surgical treatment of cancer was very unsatisfactory before the acquisition of this knowledge. In the American edition of Holmes' System of Surgery, published in 1881, we get an amazing picture of the ideas of the nature and treatment of cancer in vogue thirty-two years ago. The writers understood

1. Borst, Die Lehre von den Geschwülsten, II, 612.

the pathology of cancer almost as well as we do to-day. They display a remarkable grasp of the fact that cancer spreads chiefly by way of lymphatics, and even point out the difficulties of accounting for distant metastases by way of the blood-stream. They touch on practically every idea since developed by Handley. Their treatment, however, lagged far behind their pathologic knowledge. It is clear from the following quotation that the significance of the new pathologic teachings had not yet been fully appreciated:

"On the one side are those who extirpate cancer at the earliest possible moment, lest the local disease should spread into a general one; and on the other side are some whose counsel is against all operation; and others who deliberately remove, for example, but half of a breast affected with cancer, desiring that the disease may return. This last astounding practice is the logical result of the notion that cancer is primarily in the blood, and it proceeds on the vicious hope that by leaving a part of an organ which has shown itself prone to the disease, the material conjectured to be still circulating may continue to be attracted to an external organ."

The results of surgical treatment at that time may be inferred from the fact that a malignant growth was defined as one which invariably recurs after extirpation. Operation was condemned except in very special cases. Treatment by freezing, by general medication and by caustics was advised. Practically no hope of cure was held out. The most that was expected of treatment was to mitigate the patient's sufferings and perhaps to prolong his life. Operative technique was not yet abreast of pathologic knowledge. As late as 1887 the routine removal of the axillary glands in every case of breast cancer was generally opposed. Gross about this time began to do a somewhat more nearly complete operation. Jacobson and Stiles in the early nineties began to strip off the fascia lying beneath the breast and to take away the clavicular part of the great pectoral muscle. To Halsted in 1894 belongs the credit of developing the modern block operation.² His technique with slight modifications is the basis of all present-day methods.

In 1906 appeared Handley's celebrated monograph on "Cancer of the Breast and Its Operative Treatment," an account of a beautiful piece of scientific investigation. The teaching of this work on the manner of growth of cancer of the breast has had a great influence on the operative treatment of this disease. Let us review briefly

the argument of this work. Handley states his chief problem in the following words: "How can a cancer of the breast with all of its microscopic ramifications be completely excised? The attempt to solve this problem demands precise knowledge of the paths and methods of dissemination." Now up to the time of his researches, pathologists had supposed that the local growth of a cancer is chiefly by way of the lymphatics, but the belief was universal that the spread of the disease to distant parts of the body is by way of the blood-stream. The supposition was that emboli of cancer cells gain access to the veins and are thence carried to the right side of the heart, whence they are swept to the lungs, and from there into the systemic circulation. Handley had at his disposal a very large amount of clinical and autopsy material at the Middlesex Cancer Hospital. From this he made the following observations, which clearly disprove this embolic theory. 1. Cutaneous cancer nodules in breast carcinoma in extreme cases may involve the skin of the entire body, except that of the distal half of the upper extremity and the distal two-thirds of the lower extremity. 2. Every bone in the body has been found in one case or another to be the seat of a metastasis from a breast cancer except those distal to the elbow and to the knee. 3. Secondary cancer deposits in the lungs, where on the embolic theory we would be most likely to find them, are not nearly so frequent as such deposits in the liver.

These facts show that breast cancer does not spread by means of emboli of cells in the blood-stream, because this is a process which would affect all parts of the body alike, and therefore would prevent any part of the body from being free of metastases. But if this manner of accounting for the spread of cancer is untenable, what is the correct explanation thereof?

To understand this we must consider the anatomy of the superficial lymphatic vessels. These are arranged over the entire body in two plexuses. One of these, which is composed of very fine vessels, is situated in the dermis, just at the bases of the papillae. The other lies in the subcutaneous fat in the close relation to the deep fascia. The two plexuses are connected here and there by short vessels which pass vertically between them. These plexuses, though everywhere continuous, are divided into six drainage areas by the mid-line of the body, and by circular lines passing through the clavicles and umbilicus. These areas on each side drain into the cervical, axillary and inguinal glands by certain large trunk lymphatics situated on the

2. Halsted: *Ann. Surg.*, November, 1894.

deep fascia. At the boundaries of each area the lymph vessels communicate by fine channels. Here the stream of lymph is very feeble. Cancer of the breast involves at an early date the vessels of the deep lymphatic plexus under the breast. From this, emboli of cells are swept to the axillary glands, where they are arrested, and grow. Meanwhile the cancer creeps along the deep fascial plexus in all directions. The cells grow into the vessels and advance as easily against the current of the lymph as with it. The growth seldom extends along the subpapillary plexus. Here and there a column of cells grows upward along one of the vertical vessels and gives rise to a skin metastasis. The most distant of these in any given case will always be found at approximately the same distance from the primary growth. Cancer thus creeps over the surface of the body in an ever enlarging circle. In extreme cases the entire body except the legs and forearms may be involved, and all that saves these parts is the death of the patient, which always occurs before such extreme growth has taken place.

The body combats this spread of cancer by the formation of fibrous tissue. When a lymph vessel is full of cancer cells its distention and final rupture excite the formation of scar tissue around it. This contracts and may kill the enclosed cancer cells. This process is called "perilymphatic-fibrosis" and in slow growing cancers may lead to the death of the central part of the growth, which thus like a fire spreading in the grass, dies out in the region over which it has passed.

Bone metastases are an incident in the progress of this creeping growth. The bones are involved at points where they come in closest contact with the deep fascia. Thus the location of a pathological fracture of the humerus is most often at the insertion of the deltoid, and of the femur at the great trochanter.

The blocking and destruction of practically all the lymphatic vessels give rise to the condition known as cancer en cuirasse. In this the skin over the entire front and side of the chest, the abdomen and the arm may be converted into a thick board-like tissue which encloses the patient like a coat of mail. This condition is commonly supposed to be due to a cancerous infiltration of the tissues, but in reality is due to a formation, excited by lymphatic stasis, of scar tissue in the skin. Its pathology is similar to that of tropical elephantiasis. The "pig-skin" or "orange-peel" appearance of the skin over a

breast cancer is due to a lesser grade of the same process.

The occurrence of metastases in the viscera is always a late event and is always secondary to growth in the deep fascial lymphatic plexus. It occurs by direct growth of cancer cells along lymph vessels connecting this plexus with the subperitoneal and subpleural lymphatic plexuses. This growth Handley traced by means of serial microscopic sections of the body walls. When once the cancer has reached these subserous spaces, however, it rapidly breaks its way into the free peritoneal or pleural cavity, and its cells, transported by movements of the viscera, may be widely implanted on the serous surfaces. "Thus a cancer," to quote a very vivid figure of Handley, "which has burnt like a slow match in the parietes for months, may suddenly cause an explosive outbreak of visceral metastases."

Invasion of the thorax is rather oddly much less frequent than invasion of the abdomen. This, according to Handley, is because of the intimate connection of the superficial lymphatics with those of the abdomen at the epigastric angle. Here there is no thick bony or muscular partition to act as a barrier to the growth. The cells reach the falciform ligament of the liver, and thence are carried to the portal glands. This explains the frequency of liver metastases in breast cancer.

The thorax may be involved independently of the abdomen or vice versa and the one cavity may be invaded from the other. The proximity of the epigastric angle to the lower border of the breast explains why the prognosis of a cancer in the lower inner quadrant of the breast is so much worse than of a growth situated elsewhere in the breast.

Thus, according to Handley, with the exception of the visceral implantations just mentioned, every so-called metastasis from a cancer of the breast, no matter how distant from the primary tumor, is a direct outgrowth from the same. The neoplasm is a continuous and not a disconnected thing. As a further proof of this fact, it has been shown that emboli of cancer cells in the blood vessels—to which they frequently find access—are almost always surrounded by a clot and killed.

For the sake of clearness I have stated, without confusing qualifications, Handley's conclusions and the data on which he founds them. He himself admits that cancer metastases may arise by way of the blood stream, but he has shown that this is a rare occurrence.

Borst (Die Lehre von den Geschwulsten, vol. 1, p. 62a and following) gives an exhaustive account of this subject. The truth seems to be that the blood can destroy successfully a limited number of cancer cells, but that in the later stages of the disease, when perhaps great numbers of them are poured into the veins, some of them may develop. This fact does not in the least impair the truth or practical value of Handley's conclusions.

If we believe that cancer spreads along lymphatic channels we will take a much more hopeful view of the operative treatment of mammary cancer than if we believe that cancer cells are constantly carried by the blood to distant parts, where they give rise to new growths. If we can only cut beyond the growing margin of the cancer we can effect a cure. How can the operation be planned to accomplish this object? It is perfectly obvious that we cannot determine in any case just how far the growth has extended for the growing edge is microscopic. Therefore it is necessary to give every growth as wide a margin as possible. Handley's proof that the deep lymphatic plexus is the chief pathway of the growth has enabled us to increase immensely the extent of the operation without increasing its danger to a great extent. For the fascia can easily be stripped from the muscles over a wide area. I do not believe, however, that we should on this account take any less skin around the primary tumor, because, though the growth spreads much more widely in the fascia than in the skin, common observation as well as theoretical considerations show that the skin is liable to be involved for a considerable distance around the primary focus of growth. In fact, as Halsted and Bloodgood maintain, the incision should be planned absolutely without regard to the subsequent closure of the wound. Incisions like Jackson's are dangerous. The growth should be given a margin on all sides of at least three inches. The skin should be reflected in all directions till the costal margin, the anterior edge of the latissimus dorsi, a point beyond the mid-line of the sternum and the clavicle are exposed. The subcutaneous fat and fascia, together with both the pectoral muscles and the axillary glands, should then be stripped away in one piece from the chest wall. If cancer is seen at any stage of the operation, the prognosis, so far as a cure is concerned, is hopeless. The axilla should be cleaned out by sharp dissection, since gauze dissection here is liable to squeeze out cancer cells from involved lymphatics.

The inference which has been drawn by some from Handley's work, but which he himself does not approve, that it is necessary to strip only the fascia from the pectoral muscles, is false. The glands which are first involved lie between the two muscles and cannot be removed unless the muscles are excised. Furthermore the axillary lymphatics cannot properly be taken out unless the muscles are out of the way. Likewise the practice of excising at the first operation the breast only and then waiting for a microscopic diagnosis is fatal. Bloodgood who studied many cases in which this was done was unable to find a single cure among them. As to the necessity of skin grafting in all cases authorities differ. It is true that when the subcutaneous fat and fascia have been undermined to the extent described above the wound can frequently be closed without grafting, even when a very large piece of skin has been excised. But the flaps have to be drawn together under such tension that their edges are liable to slough, and furthermore the tension of the skin is the cause of much pain to the patient during her recovery. Immediate skin grafting adds little to the risk of the operation and is nowadays practically always successful. Halsted has recently pointed out certain other advantages of skin grafting, namely, that a graft acts as a barrier to the spread of the cancer cells, that it makes possible the immediate discovery of a recurrence in the muscles, and finally, that it enables the operator to secure the closure of the axilla with loose skin to its very apex. The latter advantage insures in all cases a freely movable and useful arm.

This radical operation for cancer of the breast is of course a tremendous one, but it has for its object the cure of a desperate disease and one which, if not eradicated, will certainly kill the patient, and that with a great amount of mental and physical suffering. The most radical operation is not half so cruel as an incomplete one. Furthermore the operative mortality with good asepsis, good hemastasis and good anesthesia is well under 2 per cent.³ If care be taken to cover the apex of the axilla with skin and to start passive movements of the arm as soon as possible the patient will regain practically the normal use of her arm.

Unfortunately most women with cancer of the breast come to the surgeon too late for a permanent cure. What is the best treatment for these advanced cases? Should cases with exten-

3. Judd, 0.4 per cent. collected papers of Mayo Clinic for 1911; Handley, 1.5 per cent. Monograph on Cancer of the Breast.

sive involvement of the axillary glands or with ulceration of the growth and skin metastases be operated on? I believe that no operation with the knife should be done on such patients unless there is a good hope that the growth can be so nearly completely excised that local recurrence will not occur. Mere excision of the primary tumor with perhaps a partial excision of the axillary glands simply excites the growth of the cancer, shortens the patient's life and makes her condition more miserable. If such excision with the knife is not possible and a painful ulcerated tumor requires removal, then the same can be excised with the cautery or excised with the knife and the wound immediately cauterized. This procedure does not accelerate the growth. The wound left after it can be given vigorous Roentgen ray treatment. By these measures it is frequently possible to limit the local growth so that the patient is kept free of pain till she is relieved by death caused by internal metastases.

Any operation which is not followed by an external recurrence of the growth is successful and well worth while. That this is possible in most cases is shown by the combined statistics of Halsted and Cheyne for 111 cases⁴ in which local recurrence took place in eighteen cases (only 16.2 per cent.).

It is strange that so many surgeons still doubt the possibility of the operative cure of breast cancer. This skepticism is the cause of much harm. For if the surgeon believes that his work is useless or at best merely palliative he will do an incomplete operation or at least he will not take the infinite pains which the complete removal of the growth requires.

I shall give statistics from three clinics which have followed their cases with great care. Cheyne⁵ reprints 50 per cent. of cures for sixty-one patients. Halsted⁶ reports 35.6 per cent. of cures for 210 cases. Judd⁷ reports twenty-one cases out of eighty-nine operated on over ten years ago, alive and well (23.5 per cent.). Also seventy-four cases out of 239 operated over five years alive and well (30 per cent.), and 233 cases out of 518 operated on over two years, alive and well (44 per cent.).

With breast cancer as with every other form of malignant growth the success of operation depends largely on how early in the course of

the disease operation is done. This truth is well brought out by Halsted's statistics. Of sixty early cases without involvement of the neck or axilla 75 per cent. were cured, while of forty cases with involvement of both neck and axilla only 7.5 per cent. were cured.

SUMMARY FOR PROGRAM

The pathologic principles on which the modern operation for cancer of the breast is founded. Evidence against the belief that cancer metastases are produced by emboli of cells in the blood-vessels. Evidence for the view that cancer spreads by permeation of the lymphatics. Importance from an operative point of view of this fact. The extent and technic of the complete operation. Statistics of operative results. Hopefulness of operation in early cases.

DISCUSSION ON THE PAPERS OF DRS. GATCH AND HADLEY

DR. PAUL MARTIN, Indianapolis: Such papers as these do a great deal to help us to a better understanding of the present status of carcinoma, to a realization of the results we are actually getting in the treatment of carcinoma, and they stimulate us to better work in trying to remove the causes. Not barring tuberculosis, carcinoma presents to-day the greatest problem of the human race for the medical profession to solve. Unlike tuberculosis, a spontaneous cure of carcinoma is rare, and unless it is eradicated early it must be considered almost an absolutely fatal disease. We have carcinoma actually on the increase in frequency as statistics show us. It has been said that this is possibly due to a more accurate method of reporting our mortality statistics, or perhaps due to greater accuracy in making an early diagnosis, but statistics do show that carcinoma of the breast is actually on the increase. We are told that of all deaths due to carcinomata 5 per cent. occur in the female and 3 per cent. in the male. Practically only one in five, or 20 per cent., or a little over, receive permanent benefit from operative relief. It is not in a spirit of pessimism that I make the declaration that our results are discouraging, but these statistics show the actual facts; that 5 per cent. of all deaths are from carcinomata in females, and that practically a little over 20 per cent. only receive permanent operative relief, which is considered the only hope of curative relief. Furthermore, we find the Mayos report 25 per cent. of their cases as inoperable when brought to them, showing that 32 per cent. are too late for operative relief. What is the cause of this? First, we may say, because it is primarily carelessness and lack of proper education of the laity. Second, lack of proper education and carelessness of the practi-

4. Hadley: Cancer of the Breast, p. 45.

5. Hadley: Cancer of the Breast, p. 45.

6. Halsted: The Results of Radical Operations for the Cure of Cancer of the Breast, Tr. Am. Surg. Assn., 1907.

7. Judd: Collected Papers of the Staff of St. Mary's Hospital for 1911, p. 220.

tioner. Third, great difficulty in making an early diagnosis, and great difficulty in recognizing its incipency.

It has been my personal experience and observation that when a woman comes with carcinoma she has had it for ten or twelve months or longer before she consults a physician, and then, as the history shows, the physician kept her under observation for quite a length of time, so that it may be eighteen or twenty months before she goes to a surgeon or before she is brought to him. This lapse of time is the only period the patient has for relief. These patients come too late.

As regards the early diagnosis, it is impossible, as has been shown in these papers, to make an early diagnosis in most cases or to differentiate a benign from a malignant case. I believe the classification between malignant and benign tumors has done more actual harm than good. A lump in the breast is a great deal better out than in; a lump in the breast when benign may become malignant. It may suffer malignant degeneration later on. Thirty per cent. of the cases give an antecedent history of mastitis, and they later undergo degenerative malignancy. Twenty-five to 75 per cent. of the cases of carcinoma give a history of having had a chronic mastitis. When there is a lump in the breast what is the use of keeping a patient under observation, to put on ointment, to give it massage and so on? Why not try and give the patient early surgical relief, whether the tumor is malignant or not? This may be determined at the time of the operation. If in doubt we may resort to the frozen section method; so then, the greatest hope for cure rests on the early operative procedure and the prime factor is this, that early carcinoma is a local disease. As we have seen, later on it permeates the lymph channels and the lymph tracts of the neighboring glands and sooner or later enters the general circulation, and then the patient is doomed. Our experience shows us that in certain localities the growth extends along definite lines. We also have known and learned from experience that when carcinoma cells are implanted in a favorable soil they will proliferate. These two principles govern us largely in the surgical treatment, that is, to remove the disease not alone en masse, but go wide of the lymph tract, removing the lymph channels and neighboring glands, and also be careful in your removal not to squeeze any of the cells and thereby give rise to secondary occurrence. These patients should be taught not to wait for the classical symptoms of carcinoma which are the evidence of widespread infection. We should not wait for symptoms, as it has been shown that patients may have metastases in viscera without having had any apparent local symptoms. Pain is a late mani-

festation. When a patient comes to you and says, "I have a lump in my breast," it does not mean the tumor started there the time she discovered the lump, but may have been there a long time before. She had no symptoms and she did not know she had it.

The ideal treatment of carcinoma is prophylactic, to prevent its development if we can. We may be able to do that by educating the laity, by having our obstetric patients, patients after childbirth, come to us regularly at a specific period of time for inspection and examination, and in doing curettage or repairing lacerated cervixes we should examine the curetted material for possible carcinoma cells.

There is one thing I should like to call to your attention and that is injudicious operation. I do not think there is any one thing which lessens the confidence of the public in the operative cure of carcinoma more than injudicious operations.

DR. JOSEPH RILUS EASTMAN, Indianapolis: These two gentlemen in their excellent papers have given us the most modern and most intelligent conceptions of this subject. There is only one man prominent in the United States who will dissent, and that is Dr. Murphy. He is the one man who has the respect of his profession who still advocates that the pectoral muscles should be left in, but I am sure that Dr. Murphy has arrived at that position in very much the same manner as Lorenz arrived at his position relative to the bloodless treatment of congenital hip dislocation. He had an intractable eczema on his hand and practiced surgery before the days of gloves and could not sterilize his hands, therefore he had to do it in a bloodless way.

Dr. Murphy devised the plan of cleaning out the axilla, using the pectoral muscle as a pad, so that contraction of the scar would not lead to edema of the arm, and he is accustomed to doing that and continues to do it in the face of anatomical reason for the removal of pectoral muscle. There is no doubt but that the large lymph vessels penetrate the pectoral muscles, coursing along with the internal mammary artery, nor is there doubt that the lymph vessels of the fascia between the two pectorals are in communication with Sappey's subareolar plexus.

For convenience the principal avenues for the passage of lymph from the breast are usually enumerated as follows: the one following the superior thoracic artery to the lymph nodes at the confluence of the internal jugular and subclavian veins; that trunk, very large in young persons, follows the internal mammary artery into the chest; the two trunks which pass from Sappey's subareolar plexus along the border of the pectoralis major into the axilla and, lastly, and perhaps the most important of all, the innumerable small vessels in the superficial fascia

and skin on which W. Sampson Handley lays so much stress.

I do not think any man has a right to do breast surgery who is not familiar with the anatomy of the lymphatics of the breast. Every man ought to familiarize himself with that anatomy as set forth in Poirier and Cunéo, as I find nowhere such a complete description of the lymphatics of the breast as is given there.

I think Dr. Gatch is right when he says Jackson's incision for the extirpation of the breast is based on faulty conception. I think Dr. Binnie dismissed Jackson in a most satisfactory manner relating to that incision when he said that "Jackson sacrifices thoroughness on the altar of esthetics." It does not make any difference what kind of scar there is. The smartest thing that Bloodgood ever said was this: "The easier the diagnosis, the more difficult the cure; the more difficult the diagnosis, the easier the cure." In other words, if these conditions are diagnosed early, when the diagnosis is difficult, the cure is not far to seek—remove the disease. If we wait until the diagnosis is so perfectly easy that a bricklayer can diagnose carcinoma of the breast, then a cure of the condition will be extremely difficult, if not impossible.

DR. DENNY, Indianapolis: I do not believe there is any physician or surgeon who is afraid of making a mistake in dealing with cancer anywhere. If a surgeon should remove the breast of a woman around the age of 40 and it is found afterwards by microscopic examination that the tumor is benign, has he committed heinous crime? I think not.

With reference to the method of removal of the breast, I think we should deal with the pectoral muscles and fascia and clean out the axillary glands, as it is only such thorough surgery that offers our greatest chance of saving the lives of these patients until we know more about the cause of the disease. I cannot see any hope for diagnosing precancerous conditions in the tissues of the body and operating on them. We certainly cannot diagnose any such thing as that in the breast. These nodules become deep-seated; we have no evidence on the surface of injury. We cannot remove all moles and warts, but one thing we can do, and we should not be afraid of making a mistake by occasionally removing a breast which proves to be benign so far as the growth is concerned. If that tumor of the breast was allowed to remain, later on it would undoubtedly have become malignant. If you remove it, do a complete operation, which will last two hours, and there is a large scar that has to be grafted, there is always the condition of whether the mortality is $1\frac{1}{2}$ or 2 per cent. That risk is preferable to waiting for the possibility of malignancy to develop.

There is one thing I should like to call attention to, and that is these women should be educated. The general practitioner is afraid of making a mistake as well as the surgeon and he waits for a while. These women should come to us sooner. These women think about a lump two or three months before they consult a physician. Our present methods of educating them are unsatisfactory. We must adopt a campaign of education by means of which we could get these cases earlier when there are symptoms of trouble in the breast or in the uterus.

DR. E. D. CLARK, Indianapolis: I believe the best way to prevent cancer of the breast is, as Dr. Hadley says, to take out these tumors of the breast when they are found, regardless of what they are, whether they are benign or malignant. It does not make any difference what they are. They are abnormal and they ought to be taken out. They can be taken out without much mutilation of the breast if we are sure it is cancer.

I think practically all operations devised for cancer are failures; I know they are in my hands. I believe more than 75 per cent. of those operated on early have remained well. It is only those cases I get very late, and in those cases in which we are in doubt as to whether or not the disease is malignant or benign I have very little hope of bringing about a cure.

As to operating on these cases when they are well advanced, I am not sure that an operation for cancer, after it is well advanced, is advisable in a good many cases; still the patient may live, and our mortality will not be affected by it. The patient may be most unhappy with a large edematous breast and with neuralgic pains in the arms and in the side. It is just as hard to bear as an ulcerating mass or ulcerating focus in the breast. It has not been my experience that the most dangerous cases are those in which the tumor mass is in the lower part of the breast. I have found those in the inner quadrant of the breast more dangerous and more liable to metastases, and when we have that growth it is more difficult to remove.

As to the question of removal of the pectoral muscles and making a very wide extensive dissection of the tissues, I want to call attention to that feature of the subject again. If you take away those muscles, the very thing that Dr. Murphy tries to retain in numerous cases, you have constriction of the vessels, edema and pain in the arms, which are just as bad as the cancer itself.

DR. MILES F. PORTER, Fort Wayne: We want to forget that cancer is a disease of middle life or past. It is oftentimes a disease of early life. I have seen several cancers of the breast and many cancers of the uterus in women under 30 years of age.

About the closure of the wound, I think we should be reasonable in all things, and if you can offer a radical operation and say to that individual that you can get her out of the hospital with a closed wound in a week, you will have an opportunity to do a great many more radical operations than you would have if you could not promise that. The result would be you will succeed in operating more cases early than the surgeon who waits three or four months for a wound to close, with irritation of the skin, thereby introducing another potential cancer in the case. While any man with experience would not hesitate to make a sufficiently wide wound to rid himself of cancerous disease, on the other hand he should not forget it is the part of wisdom to close a wound if you can, and in the vast majority of cases you can close it without danger of local return. My own experience is that you do not get a local return in the scar. If the disease returns it returns in some of the glands left in the apex of the muscle or supraclavicular space, within the chest or within the liver.

I cannot quite agree with what has been said; that the dissection of the axilla can not be accomplished with gauze. It can be accomplished with gauze more quickly, more bloodlessly than with dissecting forceps. It is more a question of individual taste, perhaps.

These wounds should be closed without drainage. If there is one clinical fact that is well established, it is that long-continued irritation of any sort is apt to lead to carcinoma, to malignant disease, and we should avoid drainage if we can on this account.

As to the movement of the arm following the removal of the pectoral muscles per se, strange as it may seem, it has little or nothing to do with whether the patient subsequently moves her arm well or not. The trouble lies not in the removal of the pectoral muscles, or in allowing these muscles to remain, but in the technic as observed in the subsequent treatment of the case. It does not make any difference whether the pectoral muscles are removed or not, if you have a wound that heals without infection, and during the process of healing, if you have taken care of the skin and the underlying fascia against immediate proximity of the other tissues of the joint, you will have no pseudo-ankylosis.

As to swelling of the arm, that depends on two things. First, the thoroughness of the operation. If the operation is thorough, if the glands in the axillary space are cleaned out and the work is done thoroughly, no matter what the subsequent technic is, you will in a certain number of cases have limited mobility in that arm on account of edema. The lymph is down there and cannot get back and until sufficient time has elapsed edema will remain, and in certain cases it will be permanent. It is an indication for

thorough operation in a great many cases, and it does not depend on the removal of the pectoral muscles or on allowing them to remain.

One word with reference to operating on so-called inoperable cases. I believe these cases should be operated on, and I would like to say here I wish every man who does surgery could read a paper which was recently read before the International Medical Congress in London on the subject of radiotherapy in the treatment of carcinoma. I believe in operating in these cases, removing all cancerous tissue and subsequently treating them with radiotherapy in the shape of radium and mesothorium, believing that those agents will afford material benefit.

I would like to make one other point. I have had three cases of carcinoma of the breast without tumor. You say we can not tell; we can surmise. A woman comes to you with a breast that is leaking; if she has potential cancer in her breast it should be removed whether she has any tumor or not. I do not believe in making a radical removal of the breast. If we insist on radical operation, we shall not get the cases early. If you remove that kind of breast or any breast with only a precancerous lesion, or the part of the breast in which the cancer is situated, that is enough, and you can do that and allow the woman to get out of the hospital early. Examine a section of the tissue you remove microscopically.

Dr. DAVID ROSS, Indianapolis: When a man does an operation for cancer he approaches it with dread, yet I heartily agree with Dr. Porter that there are many cases that come to us where a radical operation, so-called, is not needed, and yet in making that statement I realize it is also true it is impossible to tell. There is a great deal of force in the argument advanced by Dr. Gatch in support of operating on these cases early, whether there is cancer or not, because you have a chance to save the patient's life; and also thorough radical operative work should be done. Yet there are many patients who will not submit to a thorough, radical operation. It would be a great step in advance if we could tell in what cases a radical operation is not necessary, but at the present time we cannot do so. I have, in quite a number of cases, where the patients would not submit to a radical operation, removed the breast and subsequently treated the site of the operation with the Roentgen ray. I would not undertake the treatment of any tumor that is operable with the Roentgen ray, but I do believe that after a thorough dissection has been done, not only in the beginning cases, but also in those so-called inoperable cases, by removing the immediate cancerous tissue, cauterizing as may be necessary and then afterwards treating the case with the Roentgen ray, we render our patients not only more comfortable

but that we prolong life, and, as often happens in the aged, we may prevent the recurrence of the disease in some other place which takes away the patient.

DR. JAMES H. FORD, Indianapolis: There is one phase of this subject that should be emphasized, namely, that cancer is an atypical cell which is disseminated through the lymphatics. It is produced by and built on traumatism or pre-existing disease. That, I think, is the trend of opinion of the profession to-day, that traumatism or pre-existing diseased condition of the tissue is the ground in which cancer germinates.

Early diagnosis is a *sine qua non*. Dr. Eastman struck the keynote when he said that when we have a case in which the diagnosis is so easy that a brick mason can make it the chances of recovery are lessened from 40 to 60 per cent. Early diagnosis in this disease is very essential. People have to be educated. Every woman should know and should be able to teach her children that their breasts should be examined carefully by competent men about so often.

Dr. Porter said that cancer is not always a disease of middle life. My earliest case was 28 years of age, a girl, who had carcinoma of the breast. We cannot tell exactly at what age it will commence to develop.

As to the method of diagnosis and examination, I have seen women come to a doctor's office and say they had trouble with their breasts. The woman opens her dress, lifts her breast out on the edge of the corset, the doctor examines it, and he knows just as much when he gets through as he did before the woman came in. No woman should be examined for cancer unless she bares her body to the waist-line: both breasts should be exposed: they should be inspected and palpated so as to make an early diagnosis.

Another thing: the practitioner should never maul or bruise a tumor of the breast because by so doing he disseminates cancer cells: he produces metastases, where they have not developed. These are small points, but they are very essential to remember.

If I were a general practitioner and took out a suspected tumor of the breast and did not know exactly the nature of the growth, I should refer this patient to some one else. That man has no business doing surgery of the breast. When you are in doubt, cut it out, then you know you are right. It is better to sacrifice a few breasts of women of 35 and 45 or 50 years of age than to have them die of cancer. We must realize that cancer is on the increase, according to Mr. Hoffman, statistician of the Prudential Life Insurance Company, who shows by statistics, carefully compiled, that over 10 per cent. of the people in middle life now die from cancer. He has had every opportunity to

verify his statistics and we have got to awaken ourselves to a realization of that fact.

Our ordinary treatment of cancer has been relegated to the quack and the unethical man because the men in general practice and in general surgery have not paid the attention they should to it. We must cooperate with one another: we must keep our eyes open and make an early diagnosis. If we can do that I am under the impression we can cure 80 per cent. of the cases if we get them quite early or when it is a local condition.

I recall one family that came under my observation a number of years ago in which every member (a family of five) had cancer of some part of the body. Richard D. had cancer of the rectum, John D. had cancer of the stomach, a married sister had cancer of the breast which my father removed. Susan D. had both of her breasts removed; Mary D. had her left breast removed. Susan and Mary are living to-day. They were operated on thirty-five years ago. They were educated as to the cancer problem. The minute they found any trouble, or any uneasiness about the abdomen or breasts they immediately came and underwent operation. They had considered their family history very carefully. They were educated in regard to cancer.

We have a number of cases of cancer without pain. The disease is insidious in its onset. It comes like a thief in the night. The patient may have quite a large cancer and not be aware of it because there is no pain present.

What I want to draw attention to especially is the necessity of the family practitioner, who must do this work, educating the people, because he is the man who comes in contact with them first. He should teach these women to have their breasts examined by a competent man and give them instruction as to how to proceed. The moment they have uneasiness in their breasts they should have recourse to some prominent man for a diagnosis.

DR. LEONARD SCHMAUSS, Alexandria: I think we all admit that cancer is a serious matter, and why do we allow a woman (one whose name I could mention) to treat cancer? I think it is about time that we have a new definition of the practice of medicine which will prevent anybody, without at least a knowledge of the fundamentals of medicine, to practice it or to treat the sick. That is one reason why we do not get these cases of cancer to treat any earlier than we do; by allowing patients to go to quacks, to cancer specialists, to midwives, to druggists for treatment.

Speaking of cancer of the cervix, the usual period of its occurrence is about the menopause, between 40 and 50, and what is the sequence?

These cases are not taken hold of early. They do not come to us until it is too late to do much, if any, good for them. In the last case I operated I did the Wertheim operation. She did not come to me until she had had a bloody discharge for years.

There are probably in the small town in which I live a dozen patients who are taking treatment from this woman right along. She not only treats vaginismus but cancer of the cervix, fibroma or any pelvic disease. This is all wrong. It should not be tolerated one moment. If such a woman is going to practice medicine she should qualify herself to do so. I think the matter should be brought to the attention of our Legislative Committee.

DR. THEODORE POTTER, Indianapolis: This matter of cancer of the breast in general is one that concerns every physician, and I beg leave therefore to say a word or two about it. Leaving aside Dr. Gatch's paper on cancer of the breast, which we are naturally all interested in, I want to hark back to Dr. Hodley's paper and say here is something of great importance; here is something of great practical value. The paper ought to be read before the general medical section because it has been repeatedly said the general practitioner is the one who comes in contact with these cases first.

You will remember an article which was published a number of years ago by Dr. W. W. Keen of Philadelphia, calling attention to the frequency with which certain lesions became malignant, such as warts, moles and so on. Then comes along Bloodgood, who goes further than Keen and practically says every cancer of the skin is preceded by some recognizable lesion there. If that is so it is a very important matter and whether such a thing is possible or not I do not know. Every general practitioner knows that there are many instances in which comparatively trivial lesions of the face, the neck and hands, such as moles and warts, have become malignant. They are the cases the ordinary practitioner comes in contact with. They do not come to the surgeon first.

What should be done about it? When we come to think of the many lesions on people's hands, faces and neck that have subsequently become cancerous, it really becomes a matter of extreme importance, and the general practitioner should have that fact impressed on him. There are many, many instances in which he may contribute to the prevention of cancer by timely dealing with these trivial lesions.

I beg leave to say one more thing, if you will allow me. I do not speak as a surgeon, but I believe in many cases you can accomplish a great deal by needles and cautery; just a simple, easy excision.

DR. GEORGE D. MARSHALL, Kokomo: The breast is a glandular organ capable of secreting irrespective of pregnancy. We know that from our observation of lower animals. You can outline a tumor in the breast that you may think is either benign or malignant, but which will soon disappear after examination. It is a common occurrence for women to have an enlargement of the breast, and it is probably due to a number of causes, as, for instance, suppurative mastitis which develops during pregnancy. Probably some of the ducts are occluded. In some cases the breasts may secrete normally. The breast may simulate a small tumor. If the tumor is at all suspicious it is advisable to excise a portion of it for microscopic examination. In some instances the tumor will disappear under the influence of the examination.

DR. GATCH (closing the discussion): I have very little to add since I agree with most of what has been said. I perhaps would differ with some in matters of unimportant details.

As to the diagnosis of mammary carcinoma, I agree most heartily with what was said about the advisability of microscopic diagnosis, from the fact that it is impossible in most cases to make a gross diagnosis; still I believe that in the great majority of cases, even the earlier ones, especially of cancer of the breast, you can make a gross pathologic diagnosis at the operating table.

Dr. Ford made a good point when he called attention to the necessity of thorough exposure of both breasts for examination. The question of diagnosis of cancer of the breast was not treated in my paper, but since it has come up in the discussion I desire to call attention to an important sign for the diagnosis of early cases. This sign may be obtained as follows: Lift the breast gently with both hands and make it describe the greatest possible excursions in all directions on the chest. If at any point on the chest you observe a slight tugging-in of the skin over the suspected area, you probably have to deal with cancer. This sign depends on the shortening of the ligaments of Cooper, which unite the skin to the glandular tissue. It is almost as reliable as a microscopic diagnosis. It may, however, be positive in the presence of tuberculosis or mastitis.

I agree with what Dr. Clark said about the comparative hopelessness of cases when the glands are involved. In Dr. Halsted's 40 per cent. of cures the glands were not involved in the great majority of instances. Those fungating growths of the medullary type are relatively benign.

Another point in connection with cancer which is of great interest is this: I doubt whether any one has cured cancer of the breast in a patient under 30. All the cases I have seen have been such that I have doubted if it was worth while to operate on them. In my experience three or four patients have died in three to five months. One died of cancer five weeks after operation. I doubt if we accomplish anything by operation on women under 30.

The Roentgen ray treatment after operation, according to the modern methods of giving it, is worth while and should be tried in all cases. I do not know anything about the radium treatment of cancer of the breast.

I agree with Dr. Porter that if it is possible to close the wound without drainage it should be done. However, when there is a seepy wound I feel more comfortable if I drain.

I believe with the modern Handley operation, in which you strip the fat and fascia over a large area, you can remove three inches of skin around the growth and still get the wound closed. The time of stay in the hospital should be seven to ten days. It is not a mutilating operation. The use of the arm is practically normal in most cases if you get the axilla snugly covered with skin.

DR. ORANGE G. PFAFF, Indianapolis: I think Dr. Gatch left the impression from what he said that we should not operate on women with cancer under 30 years of age. I have operated on one patient that was 27 years of age, and I would dislike to have the impression go out that we should not operate on women under 30.

DR. GATCH: Perhaps I expressed myself a little too strongly on that point, but I think you will agree with me that these growths in women under 30 are very malignant.

SELECTION OF CASES FOR INTERNAL BONE SPLINTS *

KELLOGG SPEED, M.D., F.C.S.
CHICAGO

From the title it is evident that all fractures are not considered objects for plating or transplantation splints. Certain selected cases come to mind in covering this ground and I analyze the field for this most useful procedure in fractures as it appears best to me. Many hundreds

of men in this country are imitating Lane in the employment of bone plates, just what percentage are having pleasant results is difficult to state, but now that the great wave of popularity of the internal splint is subsiding a little and some surgeons are abandoning the operations, many pessimistic reports are appearing in the literature.

On analysis of these results one finds in most cases that the fault lies in one or more of the following three directions: First and most important, the wounds are not aseptic and supuration with osteomyelitis has followed; second, the operator has relied too much on the strength of the plate and has not used enough external splinting so that non-union or union with deformity has followed; third, the case was illy selected from the standpoint of the bone involved, the condition of the skin, the skill and surroundings of the operator or insufficient examination by skiagram.

Many first-class operators are heard to condemn bone plating and it would need close observation into their methods to ascertain where the fault lies, but I believe they can be found under the above mentioned three headings. Bone work, especially an endeavor to implant internal splints either of metal or bone, requires an extraordinary surgical and aseptic technic and where the operator does not devote his time to proper training for this work or does but a rare case and forgets the rigorousness of the technic, failure is quite sure to follow in a large percentage of his attempts.

Recalling the points mentioned, one must have an absolute aseptic technic. Nothing, in capital letters, must enter the wound after the skin incision but boiled instruments. The operator must learn to use large instruments as he would a knife and fork, the assistants and nurse must be particularly trained to touch nothing that goes into the wound, all needles are threaded by instruments and not handled, no business end of any instrument used is touched by a gloved hand and sponges are used on the ends of boiled forceps, used once and discarded. The surgeon must have perfect control over these matters and then must go ahead boldly with perfect confidence in his asepsis. Large incisions are necessary; make them in the first place and then discard the knife at once and follow up with a clean one. The incised area is blocked off by large sheets of sterile gauze clamped to the skin edge, the broken bone ends are exposed rapidly, freely and completely. By traction or

* Read before the Tenth District Medical Society, Gary, 1913. Illustrated by lantern slides.

manipulation ends are approximated and the plate affixed, as heavy or light a plate as is needed. Don't be afraid of deep screw-holes or many screws or a large plate. If the work is clean all will remain without irritation. For bone drill I use the one I show you; it works quickly and with a small amount of energy and will make holes in the strongest femur better than any kind I have tried.

Ligatures are not needed as a rule. The skin should be closed with clips to avoid any through and through foreign body in the edges and a copious dressing applied beneath the external splint to catch the oozing which will surely follow. Such a wound need not be dressed for two or three weeks, then remove the clips and cover at once.

Under the second heading, that of too much reliance on the strength of the internal splint, much can be said. It is sufficient to act on the basis that your external splint is applied as if there were no internal splint whatsoever and if you will bear in mind that your bone fragments have been positively and delicately adjusted and need to be held in that exact position until the plaster of your external splint has set, all will come out as it should. After a hard operation one is apt to turn over the plaster work to the assistant, but close personal attention to this may save a bitter disappointment. If traction by apparatus or an assistant has been employed to overcome the deformity and fix the plate this should be carefully maintained while the skin is closed and the dressings applied and continued constantly until after the plaster has set. In difficult femur cases with body casts this may take an additional three-quarters of an hour.

Our third factor, the selection of cases, is of equal importance and divides itself into three parts. Selection as to site of fracture selection as to time after fracture and selection of character of fracture and its concomitant conditions. First of all it is not my practice to plate fresh fractures, especially fresh compound fractures. In compound fractures, no matter how easy it may seem to place a plate one is never sure of the septic material already in the wound and it does not pay to take a chance. It will probably be found that ninety-nine per cent. of all compound fractures freshly plated lead to osteomyelitis with removal of plate and screws. These should not be plated for this reason alone, but such reasons as having insufficient covering of skin and muscular flaps, or flaps of doubtful viability on account of the trauma to which they

have been subject and the need of drainage which nearly all compound affairs demand, should warn the operator. No plate or transplant operation should be drained with special drainage of any character; there is sufficient oozing through the tightly closed skin.

As a rule in simple fracture it is best to wait ten to fourteen days after the injury before operation is attempted. This allows for care of the limb or part in loose splints, fracture boxes or other appliances with constant application of ice to reduce edema and swelling. All blebs or excoriations or abrasions of the skin in any part of the affected limb should be surgically cared for and the skin rendered clean and smooth. This may take ten days or three weeks but no open bone operation should be performed until the skin is in satisfactory shape. Wait until it is perfect. Some advocate the immediate plating of compound fractures, saying that even if the plates are removed the part gets some bony union with good position, but the result can be improved on, I believe, by allowing the soft parts to heal, caring for such infections as arise and when the skin is properly healed the area can be entered, the new callus easily broken up and exact approximation secured by a plate with every hope of an aseptic and prompt healing. Removal of plate, osteomyelitis with probable secondary operations for curetting bone or removing sequestra cause a longer disability.

A selection of cases based on the site of fracture is a variant controlled by the individual operator in most instances. Lane believes any and all bones can be successfully plated and he does it. However, it seems that this will never be accepted universally. My own belief is that fractures which can be exactly reduced by manipulation which is not dangerous, and can be held by suitable splinting are best left alone. Even where the reduction is not so exact in young children or in old people they should be carefully considered before being subjected to operation. We all know what poor resistance bone tissue has to infection of any kind and it is observed that bones of children or the aged have even a smaller amount of such resistance than the average adult. It is also a matter of observation that what appears to be a poor result following fracture in a child is obliterated by the time he reaches maturity.

Thoroughly impacted fractures, as near the knee, in the hip or wrist, are border-line cases and as a rule are not to be operated for plates. In the hip region subsequent operation may be

undertaken after a bony union is secured or after a non-union is surely demonstrated. In the knee territory one always finds a synovitis of the knee-joint or a hemarthrosis present and by the time this has subsided to the point where operative risk is nil from the standpoint of joint infection, it is found that the bone has united. These cases are best treated promptly by a Buck's extension and a heavy weight to tire out the muscles and hold the joint surfaces apart. This prevents ankylosis of the joint and later manipulation will loosen up the thickened ligaments. The bone is allowed to remain as found if deeply impacted. I have never seen fractures near the wrist much improved by plating.

Fracture of the femur in any part of its shaft from the trochanter down gives best result when plated. These should be operated while in extension and put up in body casts at such an angle of abduction of the leg as is fitting for the deformity at the site of fracture. In this way one gets prompt healing and no shortening. For similar reasons I believe most fractures of the upper third of the humerus should be plated primarily. On account of muscular action rotating or abducting the head it is impossible to reduce these by manipulation. Fractures of the humerus near the elbow are being very successfully treated by the Jones method, or by the insertion of nails subcutaneously.

In the forearm and the leg with double bone support lies a fertile field for bone plates. To avoid growing together, which hinders rotation, to avoid shortening of one side or other or angular deformity, there is nothing like the plate. In the leg where the most important weight bearing bone, the tibia, is concerned, it should be granted every possible help looking toward its best correction and should be plated properly, sometimes with more than one plate in oblique or spiral fractures. The fibula is secondary, of course. It has been observed that the lower third of the tibia is unfavorable ground for bone plates. This is due possibly to the lack of easy covering of the area after operation by the scanty tissues above the ankle or perhaps by the injury to these tissues by the trauma of operation or fracture and extraordinary care should be taken in this region.

The ilium, scapula and clavicle lend themselves readily to plating, especially the first two. Failures with the clavicle are usually due to technical errors or too large a plate. Plating on the skull has not been done to my knowledge

but it might be useful with thin plates curved to the right degree with short screws to hold in place large fragments. It is true, however, that a skull fracture which would cause such damage most often causes death and that our method of osteoplastic flap opening in craniotomies requires no holding measures to close the trap door flap.

Bone transplantation has its field of usefulness quite as exact as plating. It is a fundamental truism that bone plating is not intended for ununited fractures but that bone transplantation is. Its use also covers loss of bone continuity for any reason, following operation for tumors, osteitis fibrosa, osteomyelitis or in congenital defects. The technic of transplanting is even more rigid than plating and this work should not be attempted unless carefully prepared for. This fact must be accepted in transplanting: One is placing a piece of tissue bone, which is slow of absorption and has little resistance to infection, depriving it of blood-supply and then fixing it in a bed of the same tissue of similar weak infection resistance. In Albce operations on the spine one sees the best operators handling the bone splint with gloved hands and as a rule they get aseptic results, but one must remember that in this operation the bone splint is surrounded by a thick layer of vascular and resistant muscular tissue and should a slight infection be present the vascularity can take care of it. It is a mistake to handle this bone tissue under any circumstances. For insertion of transplants in ununited fractures the site of fracture must be widely exposed, such correction made in the nature of tenotomies as are necessary to overcome deformities and the bone ends carefully freshened and guttered to receive the transplant. The transplant is then made to order by exact measurement to fill the defect, is cut by chisel or saw, never handled and inserted into its new bed at once, the wound from which it came being promptly closed. The only transplants that are of value are the individual's own bone, best from the crest of the tibia although pieces of rib or a phalanx have been used in certain cases.

The subject of periosteum on or off is really of little importance. What is necessary is that the transplanted bone should be firmly implanted into the defect to be filled and contacted in as many places as possible with bone capable of osteo-genetic reaction, hence one uses a long splint, gutters the bone to receive it and firmly plants the transplant in its bed. If needed it

should be held there by a nail or other fixation. While the ultimate fate of the transplant is still a debated point, whether it acts as a scaffold for the production of new bone and is itself absorbed, or whether it continues in its bony life is not of so much importance for a successful transplantation as is obedience to the rules governing this operation.

As mentioned, the transplant must contact as much as possible with bone capable of osteogenic reaction. The wound must be absolutely sterile and the time of postoperative fixation must be much longer than after bone plating or fracture reduction and must be perfect. Premature use or motion breaks up the new capillary vessels passing into the transplant and may cause a failure of union. Shins from which transplants are removed fill in very quickly and feel normal in four weeks.

MEDICAL AND SURGICAL CRIMES *

ERNEST DE WOLFE WALES, M.D.
INDIANAPOLIS

It is not my purpose to indulge in malicious muckraking, for it is a well recognized fact that the present day physician of average training saves more lives than did the old-time doctor, but I wish to call attention to some world-wide abuses which seem inexcusable and are made mostly through ignorance or faulty training. Personally I believe these abuses could be eliminated through proper state board organization. We do not qualify a man by the merit of his work, but if he has passed some written examinations and paid his dues he is licensed to practice medicine and surgery in all its lines.

The medical graduate should have a practical examination under the most skilled among us in every department of medicine after completing two years' work in a general hospital. Having reached this stage the doctor should have two years' special study at least, in a special dispensary and hospital. The candidate should then pass a practical examination under a master specialist. We should all be master workmen before we are allowed to practice on the long-suffering public.

Let us examine ourselves. How many of us know the anatomy of the parts we specialize in? How few of us even think of the physiology of these parts. Examine your special magazines and note how rarely hearing tests are recorded. How few think of the function of the nose.

I should call the nose the most abused organ in the human body. Life is just as sweet with a so-called slaughtered tonsil, but with a slaughtered nose life is unbearable. Here the general practitioner is often as much to blame as the untrained specialist. This is a common experience; a patient is referred with a label, "Remove the polyp in the nose." Inspection shows a normal turbinate and no polyp. There is merely congestion and a 2 per cent. solution of cocain shows there is a normal cocain reflex. The nose is congested because of some general disturbance. The patient's pulse is rapid, lips bluish, patient does not use tobacco and there are no signs of goiter. Further examination would possibly reveal a heart lesion. The nasal congestion is undoubtedly due to this. In the same way the general practitioner overlooks congestive nasal disturbance due to chronic constipation, latent tuberculosis, kidney lesions, anemias and toxemias. The specialist who operates on the nose for a so-called polyp because the general practitioner says so and removes a turbinate to protect the general practitioner is a criminal.

It is a crime to cut out normal turbinates. How many American and German periodicals present papers entitled "The removal of five hundred turbinates." Removal of the lower turbinate is rarely indicated, perhaps once in one thousand cases and that one case is generally a result of maltreatment. The removal of the middle turbinate is a fad with some specialists. Headache is the excuse sometimes. Chronic headaches of nasal origin are rare. Often there is no headache or even contact of the mucosa or signs of sinus trouble and the middle turbinate is removed. The patient may have consulted many oculists for the headache with the report that the eyes were normal, but the retinoscope would show an error of refraction and an overworked ciliary muscle which the untrained ophthalmologist did not recognize, and the nose specialist was asked by the general practitioner to remove a normal turbinate. It is criminal to remove such a turbinate.

A paper appeared a few years ago on "One Hundred Cases of Radical Frontal Sinus Operation." All cases were acute and all would probably have gotten well without operation, as many did at the overflow meeting in the hospital, but these cases could not pay the price and consequently escaped an unnecessary operation.

It is a strange custom to treat congestion of the turbinates by application of acid or the actual cautery. The function of the nose is carried on by the mucosa and its destruction is not going to improve the function. This criminal practice of destroying normal mucosa is not only taught in our medical schools but is practiced by the general practitioner and the spe-

* Chairman's address before the Eye, Ear, Nose and Throat Section of the Indiana State Medical Association, at the West Baden session, Sept. 25, 1913.

cialist. It is so easy to destroy parts that can not be easily seen. In my opinion the cautery or acids should never be used in the nose, and most of the pathology I have seen in the nose has been caused by such treatment. Destruction of the mucosa is followed by atrophy or cystic degeneration, the result of stopping up ducts to the glands. Patients who have had their turbinates cut and burned suffer often with what Friedrich of Kiel calls postoperative rhinitis sicca (a dry nose with no sensation). The nasal function has been destroyed, resulting in crusts and a feeling of air hunger which makes the patient's life miserable and for which there is no help.

The following cases illustrative of unnecessary operation or treatment are far too common. A specialist requested a mother to send her 6 year old daughter to the hospital for a double mastoid operation. Parents refused and consulted another specialist. Mastoid tenderness could not be ascertained because Spanish-fly blisters had been made over both mastoid regions. Both drums were bulging but had not been incised. No swelling of posterior upper canal wall. Whispered voice heard three feet in each ear. Free incision of both drums and rest in bed. Patient recovered normal hearing in two weeks. Was the first specialist a criminal? Yes, either ignorantly or deliberately. Another case: Young girl treated for mastoiditis. Treatment consisted in inflating the ears twice weekly with a Politzer bag. Treatment for one year when sickness of specialist caused mother to consult another specialist for serious trouble. History showed child had never had earache or any discharge from ear. Tuning fork and whispered voice tests showed normal hearing. If this treatment was done by the former specialist in ignorance or with definite purpose, in either case are they not medical crimes? Again, a specialist ordered a young woman to go to the hospital for a radical mastoid operation. Patient refused and consulted another specialist. Hearing for whispered voice 20/25. Foul smelling discharge in auditory canal. Diagnosis: chronic eczema of the right external auditory canal. Under appropriate home treatment patient got well, with normal hearing.

Among other dishonest methods of treatment may be mentioned the treatment of cases where treatment does not improve function. I know of several patients who were having their ears treated for fear they would become deaf, taking so-called "prophylactic treatment." These patients, apparently intelligent, had normal hearing. Cases of phthisis needing general treatment, treated locally two or three times a week, the specialist

in ignorance of the general disease. Cases without number treated week in and week out with cocain and spray. A sort of banking system. Some people go to the rhinologist as they would go to a barber shop. The difference is that if the barber cuts too much hair, it grows again, but if the specialist destroys too much mucosa it never returns. Many other dishonest methods of treatment could be cited, but enough has been said to show that the Quack is not wholly on the outside. Not only has the tonsil been slaughtered, but also the adenoids, as well as the nose and ear.

The remedy to prevent these medical crimes may be brought about by educating the public, by teaching the students to treat their patients as they would like to be treated. The specialist is not a specialist because he has learned to operate on special organs. He is a specialist because he can judge when *not* to operate, and he does not need cases referred to him labelled. My most liberal judgment would decide that not more than ten per cent of his work should be surgical. The post-graduate schools accentuate operative work, and the general practitioner who takes these courses suddenly becomes a specialist and is generally a butcher. He has not learned to help nature by more gentle ways and so resorts to an operation regardless of function. The relation of the special organs to general disease is rarely mentioned in medical schools. The object of most teachers in special lines in our medical schools has been exploitation. "If you get a case in my line send it to me." This attitude has done immense harm. Perhaps the only way to stop this dishonest teaching will be to pay all teachers a salary so that they may carry on researches and teach in the school clinic. A salary sufficient to prohibit private practice or consultation. The medical and surgical puttering which is so commonly observed to-day may be stopped by honest teachers and honest men who will not stoop to unnecessary operations or treat when treatment is not called for.

Let us try to correct and prevent crimes taking place every day in our midst. Let us advocate the standardization of our speciality. Twelve years study is a short time in which to qualify a man for a doctor's responsibility. Life is too precious to be fooled with by the unfit. We create medical antagonism by our lack of fitness. The science of medicine is advancing rapidly. An examination every five years would help us. The ignorant among us are naturally sensitive and can not stand the light.

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EDITORIALS

STATUS THYMICOLYMPHATICUS
IN ADULTS

During the last decade considerable study has been given to the pathologic conditions of the thymus gland and their clinical manifestations in infants and young children, but it is only recently that the clinical diagnosis and importance of pathologic lesions of this gland in the adult have been followed out.

At the recent International Medical Congress at London, Haven Emerson of New York discussed the subject and more recently¹ his contribution has been placed in the literature. His observations were based on a study of 1,000 cases from the alcoholic wards at Bellevue Hospital at New York, and it was while watching the cases of meningitis, typhoid fever, and septic infections with an apparently high mortality rate when showing the physical marks of status lymphaticus, that he determined to test the reliability of certain criteria given for the recognition of the classical cases of status lymphaticus.

While it is recognized that the class of patients admitted to these wards could not be accepted as the average clinical subject, yet an examination of the 1,000 cases revealed 780 without any stigmata or physical characteristics which would mark them as abnormal. In contrast to this, however, 220 showed most, if not all, of the physical attributes, marking them as cases of status lymphaticus. Only 18.63 per cent. of the status cases were under 30 years and the patients' ages ranged from 19 to 84 years.

No differences of import were noted in the color, texture, luster or straightness of the hair of the head, while the beard was noted as being scanty in 9.87 per cent. of normal cases, whereas in 57.22 per cent. of the status cases it was scanty or wholly lacking. Approximately the same figures hold true for the mustache. An even higher percentage of scantiness was found in the anterior thoracic and axillary hair.

Contrary to the somewhat prevalent notion, there were not any notable differences in the faucial and lingual tonsillar tissue, but the pharyngeal tonsils were enlarged five times as often among status cases as among normal men. Palpable superficial lymph-nodes were but slightly more often found among status cases than in normals. The long, narrow thorax was considerably more common in status, and the round arched thigh over twice as common in the status cases as in the normal. The rounded feminine type of arm was three times as common in status, while the general development was diminished in twice the number of cases. Congenital anomalies were fourteen times as frequent in status cases and complicating medical affections occurred three times as often in status cases as in normals.

Another important diagnostic point in connection with this syndrome is a particularly velvety, or fine and delicate texture of the skin which is seen and felt to be almost wholly free from the usual short hairs. A striking fact was observed in connection with the spleen and one which is at variance with the observations of many European clinicians, namely a lack of enlargement.

From the pathologic laboratory of Bellevue Hospital, the report of 3,600 autopsies shows 288 or 8 per cent. of cases of status lymphaticus and of these about 30 per cent. only, were of the recessive type.

A very interesting feature also is the close association between this syndrome and the infectious diseases, particularly epidemic, purulent or tuberculous meningitis, typhoid fever, lobar pneumonia, acute and chronic pulmonary, and general miliary tuberculosis, septic infections of a variety of origins. This is strikingly shown by the autopsy records of typhoid fever, wherein 23.07 per cent. were status and of epidemic cerebrospinal meningitis 48.27 per cent.

At post mortem the essential points for a pathologic diagnosis are the gross and microscopic appearance of the blood-vessels, especially a small, soft and elastic aorta; the intestinal lymphadenoid tissues, the Peyer's patches and follicles, and the mesenteric lymph-nodes which are uniformly found enlarged; either a hyperplasia of the lymph follicles of the spleen in active cases, or fibroid tissue tufts which have replaced previous hyperplasia of the lymph follicles in the recessive cases; and finally enlargement of the thymus gland out of proportion to the age of the subject in active cases.

While it is true that some clinical data can be obtained occasionally by percussion and the

¹ Archives of Internal Medicine, Jan. 15, 1914.

Roentgen-ray, particularly in children, yet the likelihood of this decreases inversely with the age of the individual and it becomes essential that we have a clinical picture of the type of individual who seems most likely to be the victim of this syndrome, namely he with the scanty hair, slender thorax, etc., as enumerated above.

The practical deduction from the recognition of this type of individual is the knowledge that they are subnormal risks to infectious diseases and for such people all precautions, especially by artificial immunization, as for typhoid, diphtheria, meningitis and other infections, are particularly indicated. In fact, it should be recognized that they are not only poor risks in epidemics, but have a decidedly lessened resistance to shock, fatigue, surgical procedures, etc. While these individuals may be physically less capable than their fellows, their mental capacity is not always below normal as has been many times observed in scientific and artistic professions, as well as in character study.

Very much the same physical findings are obtained with reference to status lymphaticus in women as in men, save that some of them have a marked growth of hair on the face and upper lip. The recognition of this type in women is important as concerns the dangers of pregnancy and the puerperium, to which dangers they seem particularly susceptible.

This description of a definite type of individual only goes to show with what extreme caution every thorough-going physical examination should be made, and illustrates how important it is in the social welfare of a community as well as the conduct of all cases of illness for the physician thoroughly to know his patient.

FURTHER OBSERVATIONS IN INFANTILE GASTRO-ENTERITIS TREATED BY THE BACILLUS LACTIS BULGARICUS

Perhaps there is nothing in the pediatric literature of the last half decade more startling than the report of the results of Clock in his series of 117 cases of infantile diarrhea with one fatality, treated by the implantation into the intestine of living cultures of the lactic acid bacillus. It will be recalled that special emphasis was laid by this author on the importance of using a particular strain of this germ imported from Bulgaria and emanating from the laboratory at Johns Hopkins Hospital. Subsequently, the product was put out in tablet form by the Hynson-Westcott Laboratories of Baltimore, and

the contents of these tablets showed living organisms both by the hanging-drop and cultural methods. One of the chief advantages claimed for this method of treatment was the ability to effect a cure in the face of most wretched hygienic surroundings, together with a continuation of the milk diet throughout the illness of the child. As a result it was claimed that the child either lost no weight or actually continued to gain, despite the presence of the frequent number of stools. It is probable that no other form of treatment of this dread summer diarrhea of infants and young children has ever yielded such remarkable results as were reported by Clock. It was the report of this series that lead Schwartz to test out the treatment in a series of 55 cases during the months of July and August, 1913, and his report¹ follows:

"The home conditions of these infants were for the most part wretched, as over 90 per cent. of the parents were very poor, ignorant and superstitious. The cases varied in severity from moderate degrees of infection—six stools a day—to the most grave—twenty and more passages in twenty-four hours. In a few of the babies the stools were blood-stained at the time treatment was begun. The diarrheas had been present anywhere from one day up to a month or more. From three to ten lactic bacillary tablets a day were given to each baby, depending on the gravity of the illness.

"Of the fifty-five cases treated, sixteen were breast infants, thirty-two bottle and seven breast and bottle. The babies ranged in age from a few weeks up to two years; twenty-two were under six months, twenty-five between six and twelve, and eight between twelve and twenty-four months. Forty-seven were in the first year of life. In thirty-three children there was diarrhea but no vomiting; in twenty there were both vomiting and diarrhea, and vomiting was present alone in two cases. The stools were generally green, watery or curdy, foul, slimy and in a few blood-stained. A temperature over 99 F. was present in twenty cases. Some had a fever as high as 105 F. Some of the patients received no treatment other than the tablets; no starvation, no purgation and no other medication. Seventeen cases received an initial purge of calomel and castor oil and were kept on barley water alone for twenty-four hours or less. As a matter of fact, very few of the mothers of these infants actually kept the babies off milk even for this short period of time. Saline irrigations were used in twenty-seven of the fifty-five cases and

1. Medical Record, Jan. 24, 1914.

bismuth in small doses was administered along with the tablets in thirteen cases. The reason for this will be given further on.

"The results obtained were as follows: Forty-three of the children gained in weight outright; two lost; three gained and then later lost, and in seven there was no change of weight recorded. Of the forty-three whose weight increased, twenty-three started with a loss. The babies were weighed once each week, whenever possible. There were no deaths. In all cases the temperature came down to the normal within one to three days, except in a few, where there was an associated condition such as bronchopneumonia. Within two or three days after the tablets were used the stools became yellowish or brown, well-formed, free from curds, mucus and blood. The number of stools sometimes decreased and sometimes remained unchanged. To the latter children bismuth subnitrate in tablet form was given in addition to the lactic bacillary tablets with very marked decrease in the frequency of the passages. The tablets seemed to have but slight influence on the vomiting.

"While it is not advisable to draw broad general conclusions from so small a number of cases, treated as these were under very trying and unsatisfactory conditions, nevertheless it seems that the administration of the *Bacillus lactic bulgaricus* is a distinct advance in the therapeutics of gastro-enteritis of infants."

In the face of such results as these in the series now approaching the 200 mark, it is seriously to be hoped that the method will be given a thorough going and extensive trial during this coming summer and definite reports made of both the failures and the successes. It is only fair to the authors of this double series that those who desire to try out the method make certain of the viability of the organisms in the product used, particularly so in view of the fact that lactic acid bacilli of one sort or another have been on the market for many years past, and the results obtained by their use have been very indifferant. Surely no one would be warranted in condemning the method unless he knew the product to be all that was demanded by the authors of this technic.

SEX INSTRUCTION

The *News* may be a little old fashioned but somehow or other it cannot lend itself to the opinion that the welfare of innocent girls is advanced or their virtue protected by taking them on a trip through the red-light district and

showing them its sickening horrors. Yet this idea, exploited for profit by the producers of sensational plays and the writers of neurotic stories, seems to have taken hold of the public, and as a consequence the tendency to-day is to immerse innocence in filth in order to keep it clean. It matters not to the *News* whether this fad has the sanction of all the Ella Flagg Youngs and Jane Addamses in the world, the idea is repellant and is grounded in error. The fact of the matter is that the great bulk of this talk of young girls growing up without the least idea of certain vital facts which they should know is rank foolishness. There is not one girl in ten thousand who reaches the age of puberty without learning all that is necessary for a good girl to know, and she does not have to be dragged through a sewer to find it out, either. The girl who goes wrong usually does so because she is placed in circumstances where advances by the designing men are made comparatively easy, and no better paving for the road to hell is afforded than a common knowledge of evil and the privilege of discussing it which are afforded by the drama and the literature of our day. They break the ice of that conventionality which has been so powerful a safeguard for innocence.

Of course, parents should, and in the vast majority of cases do, give their children certain needed and necessary instruction, but they do not have to sit down with manikins of the male and female and enter into elaborate discussions of physiology in its relation to sex hygiene, the details of the white-slave traffic, and the way of a man with a maid. Some things are taught more wholesomely by a few plain words between parent and child than by specially arranged courses of instruction.

Virtue is not half so blind as certain crusaders would have us believe, and the *News* ventures the very respectful assertion that there is not one of them who can recall a single instance of a maiden so thoroughly guileless as to caper into a young man's bedchamber in her nightgown and see nothing of impropriety in the act. Virtue and modesty are twin sisters and their promptings are instinctive. Let a visiting man in any home come on an eight-year-old girl of the household in her night-dress and she will scamper for cover like a startled quail. Yet such a child is as innocent of sex knowledge as she was the day she was born. We are being asked to stand for a good deal these days in the way of "modernism," "progressive thought" and "advanced ideas," and the votaries of the new thought put forward such amazing propositions in such start-

ling profusion and with such remarkable rapidity that we sometimes wonder if after all much of it is not the bid of those who seek notoriety and of those even more objectionable creatures who pander for profit to the public's love of novelty and change.—*Fort Wayne News*.

EDITORIAL NOTES

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better *Journal* for you.

SOME of the advertising doctors of Indiana are using a time-honored association, the Red Cross Society, for profit by advertising as though they were connected with the society. If we are not mistaken, in one or two instances attempts of this kind have met with legal punishment, and it is time for a little further activity along that line.

WE are pleased to note that the *Journal of the South Carolina Medical Society* has taken a stand in favor of absolutely clean advertising pages. They announce that in the future only such medicinal preparations as have been approved by the Council on Pharmacy and Chemistry of the A. M. A. will be accepted for publication.

YOU want a good journal. To publish a good journal requires something more than a good editor. It requires money. Subscriptions to THE JOURNAL pay about one-third the expense of publication, the balance comes from advertising. The advertiser will not continue his advertising without returns, and that means patronage from YOU. Therefore, we earnestly urge you to patronize THE JOURNAL advertisers, and let them know that you do it. Reciprocity helps use all. Let us pull together.

OUR government is sometimes slow to recognize merit, and occasionally does not recognize it at all, but as medical men we are pleased to know that Col. William C. Gorgas, who did such an epoch-making work in the Canal Zone, is to receive reward by being made Surgeon-in-Chief of the Army. That other governments have recognized the superb work of Colonel Gorgas is attested by the fact that at present he is in South Africa for the British government. He was sent there to improve sanitary conditions in the diamond district, and was given leave of absence by the War Department for that purpose.

CONCERNING medical society delinquents we would like to suggest that any medical society is better off without a number of members who never do anything but pay dues, and even do that after a great deal of urging. A society is better for having on its membership list only "live" members. The "dead" ones are a detriment; they never show up except when there is trouble in the air and then they are on hand to raise as much disturbance as possible. Better have a few good active members who contribute something to the success of the society than a large number, the majority of whom are worthless except to hinder the wheels of progress.

TO COUNTY SECRETARIES:—The blanks for your annual report for the year 1913 have been sent to you by your councilor. It will be of great assistance if you will fill this blank out and return promptly so that the tabulation of the year's work can be printed while the news is still fresh. Last year the reports were not all in until August, and a report that is out-of-date lacks interest. When remitting dues for new members, always remember to enclose the original or a copy of the application blank.

Copies of the revised constitution and by-laws and of the rules for the medical defense are available and will be mailed to you on request. This notice applies especially to new secretaries who may not be familiar with the rules and regulations of the State Association.—Charles N. Combs, Secretary.

NEW YORK has a new health law which divides the state into districts and over each district is placed an "all-time" health officer. This man receives a living salary, is skilled in his work, and gives his whole time to the duties of his office. Indiana should have such a law. There should be an "all-time" health officer in every county. This officer should be paid a proper salary, his duties should be carefully laid down in the law, and he should be a medical man thoroughly trained in hygiene and sanitary science. Such a law was introduced in the last legislature, but the bill was smothered without even having been given a hearing. Several states now have health laws of the kind outlined. Indiana might have led the list and had the credit. For our first law of this kind was introduced in 1903. A law of this kind will undoubtedly be introduced again in the next legislature, and the physicians of the state should give it their support.

THE St. Louis *Star* has recently inaugurated a vigorous antiquack campaign similar to that carried on by the *Chicago Tribune*. As in Chicago, reporters have been the agency through which the work was done, a man having been declared healthy by a competent physician, going as a patient, first to the "606" and venereal doctors, one and all of whom predicted frightful possibilities if he did not submit to their treatment — or rather mistreatment. Concerning the campaign, the *Medical Fortnightly* has the following to say: "In the face of the revelations made, and those which will undoubtedly come, it seems little short of a crime that any newspaper has the effrontery to deprecate the campaign and question the motives of those behind it. No greater humanitarian movement has ever been undertaken in St. Louis, and that it has not been undertaken sooner is attributable to the newspapers themselves, which share in the loot of those who rob and pillage those who are suffering."

THE antivivisectionists should put their stamp of disapproval on the "swat-the-fly campaign," and the rat crusade carried on in many cities where the extermination of rats is a necessity as a sanitary and health regulation. Incidentally, the rabbit drives of the West should be prohibited, for though the farmers are slaughtering rabbits by the millions with a view to saving a few of the crops, yet the manner of slaughter is not in any sense humane. The inconsistency of the antivivisectionists in jumping on medical men who experiment, and always in a humane way, on a few worthless guinea-pigs and dogs, is quite apparent if we take into consideration the numerous avenues in which these misguided enthusiasts might work to advantage, but in which they seemingly have no interest. Their idiotic sentimentality exercised in behalf of guinea-pigs and dogs never leads them to work in behalf of suffering sick children in whose interest much of the vivisection is performed.

WILLIAM LEON BROWN of Lawrence, Indiana, has spent considerable time, energy and money in an attempt to bar quack-doctor advertising from *The Phalanx*, a prohibition paper for which Mr. Brown subscribes. The principal attack has been on the advertising of a self-appointed specialist named Dr. Houser, and after calling the attention of the editor of *The Phalanx* to the fact that Dr. Houser is not only a quack but an impostor, Mr. Brown proceeds to plead his case to the public through circulars that have been

printed and distributed to members of the prohibition party, who presumably are subscribers for *The Phalanx*. We admire the courage of Mr. Brown in putting up such a strenuous fight in the interest of honesty, and we hope that he will win, though we can assure him that a plea to the average newspaper editor who profits by quack-doctor advertising usually falls on deaf ears. The one thing that will make the editor of *The Phalanx* wince will be the dropping off of subscribers if subscriptions are cancelled because of objectionable advertising.

DOCTOR, do you pay any attention to the advertising in *THE JOURNAL*? If not, why not?

Do you not know that without the income from advertising *THE JOURNAL* would go out of existence, and that to keep up our advertising income the advertiser must get returns from his advertising, and that means patronage from YOU? If you do not patronize the advertisers, why do you not do so? We are constantly refusing objectionable advertising for the sole purpose of placing before you advertising pages with announcements in which you can place confidence. Our advertisers can supply you with practically everything you need in your professional work. They are trustworthy, and why give your patronage to others when it is the advertisers in *THE JOURNAL* who are helping you by giving you a larger and better journal. You are one of the owners of *THE JOURNAL* and should be interested in its success. You owe it to *THE JOURNAL* as well as yourself to patronize the advertisers who are helping to make a periodical that has the reputation of being second to none of the many state journals. The editors are willing to give their time and energy to the enterprise, but they need and should have the cooperation of the readers in trying to make the most important feature connected with it—the expense—turn out satisfactorily. Will you not do your part? And while we are on this subject we want to suggest that you make your assistance felt by mentioning *THE JOURNAL* when writing advertisers.

DR. CLARK, advertising specialist and medical faker, was driven out of Sullivan County by the county medical society committee on quacks, aided by the prosecuting attorney of Sullivan County. Clark posed as a representative of the Progressive Medical Specialists, and under the severe grilling given him by the prosecuting attorney admitted that he was guilty of fraud. He was given the alternative of going to jail or leaving the county immediately, never to return.

He chose the latter. What has been accomplished in Sullivan County can be accomplished in any county of the state, but it is not always possible to secure medical men who are willing to take the brunt of the responsibility in bringing action against medical quacks. As a matter of fact, what should be done is to have the local medical society as a body stand back of the prosecution, but the State Board of Medical Registration should attend to the details of prosecution as required by law. We quite agree with the saying of the secretary of the Lake County Medical Society that no man who is not occupying an official position as prosecutor desires to be made "the goat" in bringing an action against a lot of medical quacks who can find some people willing to believe that they are persecuted rather than prosecuted, and who will retaliate against the one bringing the action without taking into consideration that he is simply a representative of his local medical society.

ONE of our readers complains about what he calls the exorbitant charges made by surgeons and other specialists in the cities. He makes the very inconsistent and weak argument that there is no reason why city doctors should charge any more than anyone else. As a matter of fact, it is not an uncommon thing for doctors of limited training and experience to be jealous of or complain of others of more extended training and experience who are able to secure more patients and larger fees. In no field of human endeavor are the returns less for the time, energy and money expended, and there is no call which requires as much skill and good judgment as in the practice of medicine if it is carried on as it should be. The compensation secured by physicians will vary with ability and experience just as it varies in any other vocation for like reasons, and instead of complaining because some of our confrères are able to secure larger fees than we can, we ought to be pleased that such is the case, for it indicates the possibilities that are open to any man who is willing to put his time, energy and ability into the practice of his profession. The doctor who complains because others receive fair compensation for their work is making it all the harder for himself to obtain anything like adequate compensation. When he places a low estimate on the value of the services rendered by confrères, he also places a low value on his own services.

The Editor of *THE JOURNAL* has been appointed the Indiana representative of the A. M. A. in the Conservation of Vision work. The

position has been accepted with some reluctance, but, having been accepted, it may be plainly stated that the cooperation of the medical profession is urged in an endeavor to make the Conservation of Vision work here in Indiana count for something. It is especially desired that one or more public lectures shall be delivered in every county in the state, and to accomplish this it will be necessary for a large number of medical men to enlist their services. Those who are especially interested in the eye are urged to cooperate to the extent of offering their services as lecturers. The A. M. A. has furnished stereopticon slides and an abundance of printed literature concerning the work, all of which are available and will be sent from place to place as needed.

The Editor of *THE JOURNAL* is especially desirous of securing the services of one or more medical men in each county, or one or more men who are willing to take care of several counties in carrying out the plan that is proposed. The lectures should be free from technicality and prepared with special reference to the understanding of a lay audience. It is usually possible to give the lectures under the auspices of literary clubs, church societies, lodges or other lay organizations.

Those who are willing to help along this movement are asked to correspond with the Editor of *THE JOURNAL*.

TO THE MEMBERS OF THE INDIANA STATE MEDICAL ASSOCIATION.—You will notice on your duplicate receipt that your local secretary was required to write your postoffice address for mailing *THE JOURNAL*. This address is presumed to be correct, and if it is not or if you change your postoffice address any time during the year, notify the Editor of *THE JOURNAL* at once, and do not wait until the last of the year and then send me a complaint that you have not received your *JOURNAL* for so many months. Under this arrangement, if any mistake occurs, it lies entirely with yourself and your county secretary. Feb. 1, 1914, finds a larger list of paid-up members than the Association has ever had at that time of year. Every county has reported members and not a single county society was delinquent. Dr. Kimberlin's organization work as president last year left but two counties unorganized, namely, Brown and Newton, and with those exceptions every county has reported members. Fifteen counties have already reported more members than they had altogether last year. Dr. Wade, secretary of the Lagrange

County Society, Dr. Green, secretary of the Jennings County Society, and Dr. Martin, secretary of the Laporte County Society, write that every eligible physician in their respective counties is paid up for this year. There were over 140 new members who joined January, 1914, which gives promise of the largest and most enthusiastic State Association that we have ever had. The final result will depend entirely on the efforts of the individual members in furthering the aims and activities of the county societies and soliciting every eligible physician in the county for membership.—Charles N. Combs, Secretary.

DEATHS

HENRY ADER, M.D., died at his home in Somerset, January 5, of gastric fever, aged 70 years.

DAVID H. PATTON, M.D., aged 76, died at the home of his daughter in Otterbein, January 17, from heart trouble.

JOSEPH H. DAVIS, M.D., died January 27, at his home in Seymour after a several days' illness of pneumonia, aged 77 years.

J. W. COYNER, M.D., died at San Diego, Cal., January 6, aged 72 years. Dr. Coyner was for many years a physician of Clinton County.

WILLIAM SMITH, M.D., aged 70 years, died suddenly at his home in Muncie, January 11. He was one of the oldest physicians in Delaware County.

VALENTINE THOMPSON, M.D., for many years a medical practitioner of Union City, died at the home of his daughter in Marion, January 11, at the age of 84 years.

WARREN S. WILLIAMS, M.D., of Kendallville, died at his home January 25 from a malignant condition of the pancreas, liver and gall ducts. He was 52 years of age.

JOHN S. HOUGHAM, M.D., died at his home near Perkinsville, January 5, after a short illness, aged 74 years. Dr. Hougham was one of the early practitioners of Madison County.

HIRAM W. BOWMAN, M.D., aged 65 years, one of DeKalb County's oldest physicians and a member of the DeKalb County Medical Society, died at his home in St. Joe, February 4.

W. C. WILLEFORD, M.D., died at the home of his son in Indianapolis, January 2, of paralysis, aged 65 years. He was for many years a practicing physician of Washington and Montgomery.

WILLIAM A. CHEW, M.D., died at his home in Salamonina, January 6, after a year's illness. He was born in Darke County, Ohio, in 1858, and received his medical education at the medical college at Columbus, Ohio, and the Curtis Medical College of Indianapolis. He was 55 years of age.

FRANCIS M. JEFFERS, M.D., died at his home in Attica, February 3, of Bright's disease, aged 57 years. Dr. Jeffers practiced medicine in Odell for many years, but a few months ago his health began to fail and he went to Arkansas, returning to Indiana but a few weeks before his death. He was an active member of the Indiana State Medical Association.

G. O. BARNES, M.D., of Seymour, died January 30, aged 74 years. Dr. Barnes was born in Jennings County, received his education in the common schools, read medicine with Dr. W. C. A. Bain, attended the University of Michigan in 1864 and 1865, and received his degree from Miami College, Cincinnati, in 1876. He began the practice of medicine at Cortland, Ind., where he remained until a few years ago, when he located at Seymour. Dr. Barnes was secretary of the Jackson County Board of Health, a member of the city board of health, an active member of the Jackson County Medical Society (having served as its president) and the Indiana State Medical Association.

NEWS NOTES AND PERSONALS

INDIANAPOLIS

DR. A. C. KIMBERLIN was in attendance at the automobile show, Chicago.

DR. JANE KETCHAM has gone to Saranac Lake, N. Y., for a month's stay.

DR. THOMAS L. SULLIVAN has been appointed police surgeon under the new Democratic administration.

DR. E. D. CLARK has returned from Cleveland, where he underwent an operation at the hands of Dr. Crile for inguinal hernia.

DR. E. E. PADGETT announces that his work will now be confined to general and abdominal surgery, gynecology and obstetrical operations.

It is not thought that the Robert W. Long Hospital will be opened before May, as the tax levy for its maintenance will not be available before that date.

DR. AND MRS. H. L. CHARLES and daughter of Paw Paw, Mich., were recently the guests of Dr. Carl Lucas. Dr. Charles is an alumnus of Indiana Medical College, class of 1905.

DR. GEKLER of the Rockville Tuberculosis Sanitarium delivered a lecture on "Artificial Pneumothorax and Thoracoplasty in the Treatment of Tuberculosis" to the junior class of medical students.

DR. AUGUSTUS MARSHALL has been appointed superintendent of the City Dispensary, his service beginning February 1. Dr. Marshall is also the superintendent of the Deaconess Hospital, which position he is to retain.

SOME eight or ten physicians attended the banquet recently held at the Claypool Hotel in commemoration of Founders' Day of Indiana University. Dr. A. W. Brayton responded to the toast, "Medicine in Indiana."

GENERAL

DR. R. F. BANISTER, who formerly practiced at Paris Crossing, is now located at Columbus.

DR. C. L. MARLATT has recently been appointed physician for the Marion County jail.

DR. R. J. PIERCE, coroner of Wayne County, has recovered from a serious attack of scarlet fever.

DR. W. A. HAGER of South Bend has recently returned from Philadelphia, where he did some special clinical work.

THE fifth annual session of the Clinical Congress of Surgeons will be held in London the week of July 27, 1914.

DR. G. W. VARNER, of Rockville, while attempting to crank his automobile on February 6, had his right arm broken.

GARY General Hospital is planning the erection of a new \$100,000 hospital with fifty rooms to be built in the near future.

DR. R. D. MORROW of Richmond has been appointed township physician to fill the unexpired term of Dr. F. W. Krueger.

DR. J. E. KING, after six years of service as health officer of Wayne County, has been succeeded by Dr. F. W. Krueger.

DR. SILAS WEIR MITCHELL, noted neurologist, author and physician, died at his home in Philadelphia, January 4, aged 85 years.

DR. B. McWHINNEY, formerly of Indianapolis, has located at Rushville, and will there engage in the practice of medicine.

THE Gary public schools are publishing a Hygiene Bulletin which contains much information concerning the prevention of disease.

DR. D. L. MCAULIFFE of North Vernon was confined to his home several weeks recently suffering from a severe attack of appendicitis.

DR. F. G. THORNTON of Knightsville was struck by an automobile at Indianapolis on January 7 and received injuries, including a broken leg.

DR. H. J. HALL of Franklin recently underwent an operation at the Methodist Hospital, Indianapolis, for gall-stones. He is recovering nicely.

DR. J. M. IRVING, formerly house surgeon at the Chicago Union Hospital, has located at Bicknell, having opened offices in the Kixmiller Block.

DR. J. S. RAGAN of Plainfield has accepted the position as regular physician at the Indiana Boys' School and will devote his entire time to the institution.

DR. H. H. YOUNG of Brazil left January 19 for Pittsburgh and New York City to study improved methods and take a postgraduate course in medicine.

THE American Society for Physicians' Study Travels has arranged for an interesting trip through a number of the Eastern cities during the coming summer.

AT a recent meeting of the Huntington County Medical Society plans were discussed and are now under way for the publication of a medical history of Huntington County.

DR. K. W. HIBY, who has been employed for some time by the State Board of Health, left January 12 for Ely, Nev., where he will engage in general practice.

A NEW department has been opened in the *Journal of the Michigan State Medical Association*, where members may state their stand on the fee-division question.

DR. W. W. VINNEDGE of LaFayette, the oldest living graduate of the Cincinnati Medical College, was severely injured recently when a motor car collided with his buggy.

THE Sisters of St. Elizabeth's Hospital, LaFayette, entertained the members of the medical staff and the corps of lecturers of the training school at their annual banquet, January 28.

THE new pension examining board of Putnam County, who have just received notification of their appointment, are Dr. G. W. Bence, Dr. Jerome King and Dr. Eugene Hawkins, all of Greencastle.

DR. JOHN OWENS, who has held the position as educational secretary of the State Board of Health for some time, has resigned the position and accepted a similar one with the Illinois Board of Health.

DR. LYDIA A. DEVILBISS of Fort Wayne has accepted the office of medical director of the Better Baby Bureau of the *Woman's Home Companion*, New York City, and left January 14 to take up her duties.

A SUM of \$5,000 has been bequeathed to the Union Hospital of Terre Haute by the late Mrs. Elizabeth Mattox, widow of Dr. James Mattox, who was murdered on the streets of Terre Haute a number of years ago.

MISS FLORENCE BENNER, a graduate of the Cincinnati General Hospital Training School for Nurses, has been called to Richmond by the Domestic Science Club as visiting nurse and has the responsibility of organizing that work there.

THIRTY acres of land on an elevation overlooking the St. Joseph river has been purchased by the St. Joseph County Commissioners as a site for a new county tuberculosis camp. The construction of cottages will begin in the spring.

THE editor of THE JOURNAL and daughter Geraldine have recently returned from a short Florida vacation. They spent several days in deep-sea fishing in the Atlantic off Long Key, returning home by way of Miami and Palm Beach.

DR. ARA BADDERS of Indianapolis has opened an office at Onward, where he will begin the practice of medicine. Dr. Badders graduated from Indiana University School of Medicine last spring and has since been serving as intern in an Indianapolis hospital.

DR. T. HENRY DAVIS, after thirty-eight years of service as city health officer of Richmond, has resigned and has been succeeded by Dr. Solomon G. Smelser. Dr. Davis is also a member of the Indiana State Board of Health, having filled that office for eighteen years.

DR. A. R. MEAD, formerly of Jeffersonville, has located at Orleans and will be associated with Dr. W. H. Patton of that place. Dr. Patton recently suffered a stroke of paralysis, and, although much improved, it was necessary that he be relieved of some of the burden of his practice.

THE State Board of Medical Registration and Examination elected the following officers at a recent meeting: president, Dr. James M. Dinnen, Fort Wayne; vice-president, Dr. W. A. Spurgeon, Muncie; secretary, Dr. W. T. Gott; treasurer, Dr. M. S. Canfield, Frankfort.

THE tenth annual conference of the American Medical Association on Medical Education and Public Health Education and Legislation will be held at the Congress Hotel, Chicago, February 23 and 24. A very instructive and interesting program has been arranged.

A BILL requiring satisfactory health certificates of male applicants for marriage licenses was defeated in the state senate of South Carolina by a vote of twenty-two to seventeen. A citation of the complications following the enactment of a similar law in Wisconsin was apparently, in a large measure, responsible for the result.

PHILIP BRUNER, second son of Dr. Charles K. Bruner of Greenfield, died January 12 of double lobar pneumonia, aged 25 years. He graduated from the Greenfield High School in 1907, from Earlham College in 1911, received his M.A. degree at Earlham in 1912, and was a medical student at the Indiana University at the time of his death.

A SIXTY days' tour of the well-known European surgical clinics is being arranged under the auspices of the Georgia Surgeons' Club, to close with the meeting of the Congress of Sur-

geons of North America in London the latter part of July, 1914. Representative surgeons are invited and may secure details of the trip from the secretary, Dr. R. M. Harbin, Rome, Ga.

THE two sons of Dr. J. S. Sprowl of Warren are preparing themselves for the practice of medicine. Fred G. Sprowl is a graduate of the University of Pennsylvania, served two years' internship in the University Hospital, and is now taking a two years' course in the New York Eye and Ear Infirmary. Raymond J. Sprowl is a graduate of the University of Pennsylvania, and is now finishing a two years' internship in the Hospital of the P. E. Church, Philadelphia, in internal medicine.

THE Sullivan County Medical Society has issued a memorial calendar in honor of Hon. John Wesley Davis, M.D., an early practitioner in Sullivan County. Aside from the practice of medicine, Dr. Davis served six terms as state representative, four terms in Congress, was speaker of the house in 1851, commissioner to China in 1847, governor of Oregon Territory, minister to Mexico and chairman of the Democratic National Convention in 1852. The calendar gives the program of the Sullivan County Medical Society for 1914, and also a list of the members and officers of the society.

A PRIVATE hotel for sick people is a new feature of the Flower Hospital, located at 450 East Sixty-Fourth Street, New York. This new pavilion of the Flower Hospital meets a long-felt need and provides for patients every protection and luxury that they may desire. Special attention will be given to furnishing for the table whatever a capricious appetite may demand. Suites are so arranged that a member of the family may be accommodated with an adjoining room. Open fireplaces, telephone service, private bath—every facility is furnished to add to the comfort, happiness and convenience of the patient. Rates are from \$9 to \$25 per day.

THE last legislature empowered the State Board of Health under certain conditions to command the installation of water filtration works in cities where needed. At a recent meeting of the board, an order was issued to the water-works officials of New Albany that they must install a filtration plant. The board also ordered the city of Brazil to put in a proper sewage disposal plant. An order of the same kind was issued to

the city of Indianapolis two years ago, and an appropriation of \$10,000 was made by the city council for the purpose of investigating the situation, and preliminary work to determine the proper kind of purification plant to be installed is now under way.

SINCE January 1 the following articles have been accepted for inclusion with New and Non-official Remedies:

Hynson, Westcott & Co.:

Phenolsulphonephthalein, H. W. & Co.

Phenolsulphonephthalein Ampoules, H. W. & Co.

H. K. Mulford Co.:

Anti-Anthrax Serum, Mulford.

Antistreptococcus Serum Scarlatina, Mulford.

Disinfectant Krelon, Mulford.

Salicylos.

Staphylo-Serobacterin.

Strepto-Serobacterin.

Typho-Serobacterin.

WHY SHOULD IT BE THUS?—DOCTOR, you mean to hold your county and state society membership, don't you? Then why in the name of Pete don't you pay your dues?

Why should we be compelled to go from office to office and from town to town with a piece of lead pipe in one hand and a receipt book in the other?

We don't like it, haven't time to do it and it isn't fair to expect us to do it. On the other hand, we want you with us.

This issue is being mailed to all eligible citizen physicians in Lake County. The February issue will be mailed to members only. Get that! If you think your membership worth the money, send us three (3) iron men at once; if you don't think it worth the money, goodness knows we don't want either you or your money.—It's your move, doctor!—January *Bulletin*, Lake County Medical Society.

FOUR hundred men and women of prominence, comprising the first representative group of scientific experts ever gathered in America for that purpose, met in Battle Creek, Mich., the second week in January to assemble evidence of race deterioration and to consider methods of checking the downward trend of mankind. The meeting was known as the First National Conference on Race Betterment. The addresses of the prominent men and women who attended, together with open discussions on many of the

points considered, constituted a very wide-spread study of all phases of evident race degeneracy and the advocacy of many ideas of reform. Some of the suggested methods of improvement are: Frequent medical examination of the well, outdoor life, temperance in diet, biologic habits of living, open-air schools and playgrounds, the encouragement of rural life, the segregation or sterilization of defectives, the encouragement of eugenic marriages by requiring medical certificates before granting license and the establishing of a eugenics registry for the development of a race of human thoroughbreds.

LAPORTE physicians, at a recent meeting and banquet, had as their guests some of the city officials, and discussed health conditions and needs of the city along various lines. Dr. A. R. Simon, as the first speaker, emphasized the need of better sanitation, the policy of cleaning up, factory and school inspection, and other matters of vital importance to the physical welfare of the community. Dr. O. B. Nesbit spoke regarding the betterment of sanitation and other conditions in the public schools, urging the necessity of having a school supervisor—a physician—whose activities would prevent the spread of disease; the importance of having such sanitary conditions in the city at large that it would be impossible for contagious diseases to gain a foothold, and the establishment of hygienic methods. He also pointed out the importance of employing teachers in the schools who would reflect the sunshine of life, rather than chronics and dyspeptics whose presence cast a shadow, which is an influence on rapidly developing child life. Dr. Thompson, secretary of the city board of health, pledged the labors of the city department to a general cleaning up, and the employing of modern methods of sanitation.

CORRESPONDENCE

IMPROVEMENT IN THE SESSIONS OF THE ASSOCIATION

JASPER, IND., Jan. 1, 1914.

To the Editor:—The paramount questions in the mind of every interested member of the Indiana State Medical Association should be how to better the Association, how to encourage a larger membership, and how so to improve the meetings as to fulfill to its individual members the obligation of the Association.

From birth the Association has been a powerful factor in the dissemination of scientific medical knowledge and each year of its existence has been marked by the presentation, at the annual sessions, of some most excellent contributions on the part of its members. In fact, it is the excellence of these papers which makes for the true value of the Association and its inherent worth to its members. The last session proved no exception to the rule, and though one of the best ever held let us all put forth our best efforts toward making the next one even better in order that every member, whether new in the Association, or one of long-standing, like myself, may leave the session, willing and glad to attest to the benefit he has derived therefrom.

It is the rural doctor or the one practicing without the immediate environment of those pursuing the various specialties in medicine, who are most benefited by the Association sessions, and it is he, above all others, who should profit most by papers read and thoroughly discussed at the annual session.

It would seem that the greatest benefit would accrue from a sufficiently early arrangement and distribution of the program for every member of the Association to prepare himself for a most thorough-going discussion of one or more subjects. Nothing can compare in value to that derived from a full and lively discussion of a good paper. Aside from the benefit to every individual who has so prepared himself for the discussion, a compliment is being paid to the efforts of the man who has put the proper amount of time and energy in the preparation of his paper.

The march of medical progress along the lines of preventive medicine, hygiene and sanitation, serum therapy, the therapeutic effects of the products of the ductless glands, pathology, bacteriology, refinements in diagnosis and surgical technique, has been so rapid and of such tremendous import that it behooves every progressive practitioner to avail himself of every possible means of familiarizing himself with all that he can master. In the light of recent achievements in medicine, it is well-nigh impossible to predict all that the future has in store for us.

Because of the fact that so much of the success of the coming session depends on the program committee, it is to be earnestly hoped that each individual member will bend every effort toward making the 1914 session the most successful one ever held.

JOHN P. SALB.
Pres. Ind. State Med. Assn.

SOCIETY PROCEEDINGS

SEVENTH DISTRICT MEDICAL SOCIETY

The annual meeting of the Seventh District Medical Society was held at Plainfield, Nov. 19, 1913. Called to order by the president, Dr. H. C. Robinson, Martinsville. Invocation by Rev. T. F. Williams. Address of welcome by Dr. Amos Carter, Plainfield.

The minutes of the previous meeting were read and approved.

The treasurer's report was as follows:

| | |
|---|---------|
| Collection from Martinsville meeting..... | \$24.15 |
| Expenses of last year's meeting..... | 13.80 |
| Balance on hand | \$10.75 |

In his presidential address Dr. Robinson called especial attention to the important rôle played by the county medical society. Attendance at county society meetings stimulates the professional spirit, broadens our observations, makes us better physicians, and fosters more esteem and more respect from the communities in which we live and work. Great state questions, such as sanitation, medical legislation, etc., are constantly before us and we can act with more force as an organization in the solution of these problems than individually and separately.

This is not only a scientific age, but a mercenary age. When every proposition that suggests itself is punctuated with the interrogation, "Does it pay?" there is danger that the practice of medicine may become misused. It is as true to-day as of old that the love of riches is the source of all evil. In the eagerness to get fees one sometimes oversteps ethics. Fee splitting is too prevalent. From no standpoint is this method of getting fees justifiable. The physician who gets business or fees in that way can by no logic convince himself that it is right. It is dishonorable—it is degrading—it is dirty. The physician who practices it places himself in that great class whose motto is "Addition, Division and Silence," and which is popularly dubbed "grafting." When the conditions are such with my patient that a surgical operation is deemed necessary and his welfare depends on it, and my advice is sought in selecting that physician, it is my duty to give that patient my honest and conscientious advice, uninfluenced and unbiased by anticipation of a division of the operator's fee. Any other course is unjustifiable. By any other course I violate the confidence that is reposed in me. Let the general practitioner, the family physician, retain his own fee. Let the operator retain his, and let each of them retain his self respect.

The organization of the state association for the protection and defense of its members against malpractice is a laudable and practical thing, for these suits can be more successfully defended by united than by individual effort. If every Indiana physician were a member of his county society there would be fewer malpractice suits brought.

Dr. William Shimer, Indianapolis, presented a paper on "The Relation of the Public Health Laboratories to the Physician."

Dr. Morgan opened the discussion by emphasizing the necessity of the public laboratory to the general practitioner, and called attention to the fact that the cooperation of physicians is necessary to obtain the proper results. Dr. Morgan mentioned the problem

encountered in putting children out of school who are found capable of conveying diphtheria. Scarlet fever is not quarantined long enough as a rule; very few cases are rid of it in less than three weeks. There should be some provision for muzzling of dogs, in an effort to prevent rabies.

The paper was further discussed by Dr. Pantzer, who paid a glowing tribute to the Indiana State Board of Health; and by Drs. Terrell and Wynn. Dr. Wynn mentioned the value of the Widal test in diagnosis of typhoid, but stated that he thinks oftentimes too much importance is attached to this reaction. The test should seldom be made before the seventh day.

Discussion closed by Dr. Shimer, who said that during the last season the laboratory has only had 19 per cent. of positive Widal's.

Dr. J. S. Ragan presented a paper on "Methods of Treatment other than Medicine and Surgery."

Discussion opened by Dr. F. B. Wynn who stated that suggestive therapy is not sufficiently appreciated by physicians. Has a place in organic disease as well as functional. Mentioned recreative therapy as an important factor in dealing with the nervous types; in beginning arteriosclerosis, etc.; called attention to the great problem of proper recreation of country women. In advising recreation it is necessary to study individual tastes. Many times recreation will do more for a patient than medicine.

Dr. O. N. Torian read a paper on "Infantile Eczema."

Discussion opened by Dr. A. W. Brayton who approved what Dr. Torian said concerning the great factor played by improper feeding in infantile eczema.

Also discussed by Dr. Taylor.

Dr. E. D. Clark read a paper on "Splenectomy."

Dr. Bernays Kennedy reported a case of combined intra and extra-uterine pregnancy.

Dr. E. E. Padgett presented a paper on "Present Status in use of Pituitrin in Gynecology and Obstetrics."

Discussion opened by Dr. C. E. Ferguson, who stated that the drug should not be given too early. Has only a limited field. Should not be used after labor is well established, and only when mother is able to give birth to child in normal way.

Also discussed by Dr. Burekhardt.

Dr. E. M. Sweet, Martinsville, read a paper on "Intestinal Auto-Intoxication."

In the opening discussion Dr. Tomlin called attention to the fact that origin of the infection in many of these cases is in the nasal sinus region. Reported case which illustrated this point.

Dr. C. E. Cottingham read a paper on "X-ray in Treatment of Goiter."

Dr. Reed opening the discussion, advocated thorough medical treatment for every case; surgery later if medical treatment has failed.

Dr. Wynn was first to use X-ray on cancer and goiter in Indianapolis. Stated that he had used the X-ray on several cases of goiter with favorable results.

Dr. Burekhardt advised against use of the X-ray in pregnancy.

Dr. Kennedy stated that he had used Beebe's serum in these cases, but with questionable results; some improvement in general symptoms but very little in pulse rate.

Also discussed by Drs. Lindenmuth, Kitchen, and closed by Dr. Cottingham. Dr. Cottingham stated he

preferred to use the X-ray during pregnancy rather than allow the exciting symptoms to continue.

Election of officers resulted as follows: Councilor seventh district, Dr. W. N. Wishard; vice-president Marion County, Dr. W. B. Kitchen; vice-president Morgan County, Dr. V. A. Magenheimer; vice-president, Hendricks County, Dr. Thomas G. Smith; vice-president, Johnson County, Dr. Cox; secretary-treasurer, Dr. Jewett V. Reed, Indianapolis.

Dr. Lindemuth presented a paper on "Diagnostic Value of the X-ray to the General Practitioner."

Dr. W. F. Kind, assistant secretary of the state board of health, read a paper on "Sanitary Laws."

Vote of thanks extended to physicians of Plainfield and the Ladies' Aid Society of the Christian Church for excellent dinner and entertainment of the society.

Adjourned. DANIEL W. LAYMAN, Secretary.

FORT WAYNE MEDICAL SOCIETY

Meeting of October 7

The Fort Wayne Medical Society met in regular session in assembly room with twenty-three members present. Meeting called to order by President Gross. Minutes of preceding meeting dispensed with owing to absence of secretary.

Clinical cases were reported by Dr. Duemling.

Case 1.—Mrs. H., aged 32; married. Three children living, ages four to nine inclusive. Previous history: suppurative appendicitis twelve years ago; appendix removed; secondary abscess followed; two years ago she noted lump like mass in abdomen, growing larger last three or four months; has had some loss in weight. Present illness: a rather copious hemorrhage from vagina occurred two months ago; has had more or less hemorrhage ever since; chest and abdomen negative. The patient is suffering from secondary anemia. Presents irregular tumor occupying right side of uterus, size of a coconut; smooth, movable and not very sensitive. Pulse normal, temperature normal, urine negative. Blood examination: haemoglobin, 28 per cent., total whites 12,200, reds 2,160,000; differential count not made. Laparotomy revealed a large intramural fibroid occupying right horn of uterus. Inside uterus is a mass of tissue attached to anterior wall which is about 2 inches long and 1 inch wide, with necrotic and hemorrhagic surface. Pathologic report shows section of mass to be remains of an old placenta tissue which has undergone malignant changes. Syncytial cells are multiple and invading deep structures. Diagnosis chorio-epithelioma.

Case 2.—Baby F., aged 11 months. Family history negative. Personal history: about six months ago noted presence of a lump just below clavicle on right side; gradually growing larger. Tumor about 3 inches in diameter, adherent and situated just below the outer two-thirds of clavicle. Blood and urine negative. Tumor enucleated. Pathological report as follows: gross examination of tumor shows it to be 3 inches in diameter and $\frac{3}{4}$ inch in thickness, somewhat friable and elastic. It is white and apparently solid. Microscopically: tumor is surrounded by a very dense capsule containing a trace of connective tissue; is made up of young connective tissue cells, small round cells and striated muscle cells. The growth is very well nourished, which is revealed by a large number of blood vessels. Diagnosis mixed celled sarcoma.

DISCUSSION

Dr. Weaver: Examination of gross specimen shows minute villi perfectly.

Dr. Bruggeman: This may not necessarily be malignant. It is quite possible that we are dealing here with what was formerly known as a hydatid mole.

Dr. Rhamy: This specimen evidently was a hydatid mole originally.

Dr. Grandy: Some of these moles are malignant and some are not. The malignant type should be gotten out before metastases occurs.

Dr. Edlavitch: What other possibility in reference to this piece of tissue? It brings up the question of uterine polypus undergoing malignant degeneration. Found a field in a section of this growth showing squamous celled carcinoma.

Dr. Rhamy: Disagrees with Dr. Edlavitch. The section is free of villi and there is no question but what this was originally a hydatid mole.

Dr. Duemling, in closing: Said he had had an exact duplicate of this case of fibroid with hydatid mole.

Dr. Miles Porter, Jr. read Dr. McCaskey's paper on Bright's disease.

DISCUSSION

Dr. Bruggeman: Until pathology of high blood-pressure in reference to Bright's disease is worked out, therapy directed to same must be held in abeyance.

Dr. Porter: Numerous cases of gall bladder disease die from conditions such as are produced by Bright's disease. Continuous excretion by kidneys of irritating substances will eventually lead to what we understand to be Bright's disease. Frequently the fact that kidney symptoms are present is indication that certain other organs need attention, for instance, liver or thyroid. Emphasized importance of preliminary treatment of certain of these cases some days before operation. Many of these cases, after preliminary treatment, will recover from their operation, when, if operated immediately, would die.

Dr. Weaver: To get most out of blood-pressure, we should get difference between systolic and diastolic pressure.

Dr. Duemling: Proper environment and preparation for operation have a great deal to do with success in these operations, particularly when kidneys are involved.

Dr. Porter, Jr.: Believes that all chronic non-suppurative inflammations of kidney are result of chronic toxemia. Bright's disease, according to Dr. McCaskey's theory, is result of this chronic toxemia, and there should be an effort to rid the system of its influence early.

No business. Adjourned.

G. VAN SWERINGEN, Secretary.

Meeting of October 14

Society met in assembly room with thirty-one members present. Meeting called to order by President Gross. Minutes of three previous meetings read and approved. Clinical case night.

Case 1.—Dr. Duemling: Mrs. C., aged 31 years; married; American. Family history negative. Two children living and well. Ordinary diseases of childhood. Six years ago, during sudden jar in street car was thrown against seat ahead. Two years ago complained of burning sensation in the posterior lumbar region of left side. One year and a half ago observed

presence of lump in that region. Lost fifteen pounds in weight in last year. Examination shows tumor in left posterior lumbar region size of a goose egg; is hard and slightly movable; appears adherent to crest of ilium; is not painful; skin moves freely over surface of tumor; some pain on deep pressure. Chest negative, abdomen negative, blood and urine negative. Tumor enucleated; shelled out easily. Pathologic report: gross specimen is a hard white tumor about size of fist. Cut section shows many striae of connective tissue having the appearance of a fibroid growth. Microscopical: section is made up of spindle cells radiating in every direction and has very little connective tissue present. Diagnosis: spindle celled sarcoma.

DISCUSSION

Dr. M. F. Porter: There is no question of doubt that sarcoma is produced by injury. There is a possibility of these tumors undergoing degenerative change so that you have a combination of carcinoma and sarcoma. As far as treatment is concerned, removal is the only treatment and it should be wide. My own judgment is that we should know the variety of malignancy before operation.

Dr. Edlavitch: Exhibited specimen from patient 55 years of age. Marked alcoholic history. Femoral hernia of eighteen years' duration. Incarcerated and replaced by taxis. Last night had a recurrence of strangulation. Died suddenly on operating table during early stage of anesthesia. Post-mortem: Heart shows brown atrophy with patches of sclerosis; marked coronary sclerosis; occlusion of coronary arteries; bony spur projecting from aortic valve.

Dr. Porter, Jr.: This man's heart did not sound bad; his pulse was 80 and regular when anesthetic was begun; took ether badly and was cyanotic during entire anesthesia.

Dr. McCaskey: We have no way of determining presence of lesions of this type during ordinary physical examination unless some of the phenomena, due to lesions of this type, occur at time of examination. No doubt this individual had attacks of angina pectoris.

Dr. Porter: This case emphasizes danger of asphyxia during anesthesia. Asphyxia is a danger signal during anesthesia.

Dr. Morgan: Having given a number of anesthetics, it has been my experience that a man with a crippled heart takes his anesthetic better than another.

Dr. Bruggeman: This man had a blocking of coronary arteries which produced his death. He did not die from anesthesia, but from blocking of arteries.

Dr. Duemling: We must not forget that this man had an enormous hernia and one upon which taxis had been attempted. All the insults to his abdominal brain plus the anesthetic aided in his death.

Dr. Porter: I think it is time to write into our text books of surgery that given a diagnosis of strangulated hernia, taxis should be proscribed.

Dr. Weaver: I operated a female with myocarditis with strangulated hernia who went through operation and convalescence without interruption and died of coronary sclerosis.

Dr. Beall: The interesting point is what is causing this sclerosis. This man was an alcoholic, but alcohol does not produce sclerosis. This man evidently had specific disease.

Dr. Rhamy reported the following cases. Exhibited specimens and microscopic sections of each.

Case 1.—Chorio-epithelioma. Mrs. P., aged 41; farmer's wife; three children, youngest 10 years old. Menses usually regular, but scant. Nine years ago, or one year after birth of last child, menses stopped and she considered herself pregnant. She gradually became weak and run down, had backache. Began flooding the fifth month and was curetted by the attending physician, who removed from her uterus a whole wash-basin full of "something that looked like honey comb." She was curetted again five years ago, and also six years ago, and at these times there was "less honey comb and more of what looked like little sacks of water"; evidently hydatid mole. Her present history: Menses stopped in August and she thought she was six weeks pregnant. Three weeks ago had two hemorrhages of two hours' duration on two successive days followed by considerable general aching, and thought she had fever. Physician called but found temperature normal. Next day, while walking in kitchen, became dizzy and fell; went to bed, and began having a watery, purulent corroding discharge, not constant, but irregular and without pain. On Friday (three weeks after onset) she got up and went to the dinner table. At this time she had a hard chill and quite severe hemorrhage, which stopped suddenly and began again the next day. She was brought to the Van Wert hospital for examination. Temperature 99.2, pulse 90. Patient pale and looks ill. Weight about 180 pounds. Physical examination: uterus enlarged, very soft and boggy; irregular in contour, i. e., felt lumpy in some places and soft in others; cervix normal; contains a bloody, grumous discharge. Diagnosis probably syncytioma malignum. Hysterectomy done following day and tumor found in uterus was sent for microscopic diagnosis. The patient has returned home from hospital feeling as well as ever.

Case 2.—Stricture of sigmoid from chicken bone, which perforated bowel. Dr. Metts of Bluffton furnished the following report of case: "Patient Mrs. H. L. R., aged 63 years. Family history negative; three children, no miscarriages. Menstruated regularly up to 53; had diphtheria at age of eleven; health was good until five years ago when she was taken ill with what was called 'uric acid poisoning'; she was sick nine months, suffered severe pains throughout muscles. From that time on has been more or less constipated. About two years ago began having pains in lower abdomen and pelvis, which seemed to center in sigmoid region and from there to radiate in all directions. At this time it became necessary for her to take physic continually and finally she could not have a stool unless it was rendered fluid. Two weeks before she died was seized with a severe pain in the left side, low down, which was paroxysmal in character, which became more intense, continuing until death. About twelve hours before death she developed increased pain. I was called by her attending physician about midnight to operate. Her physician had given large amounts of cathartics in the form of salts and castor oil, having given her twenty-six ounces of oil during week without getting a bowel movement. You can imagine the cramps she would have from having two or three gallons of liquid bowel contents forcing themselves up against this stricture every few minutes. She collapsed about noon of day before which she died. After collapse pulse became feeble, abdomen distended, refused to operate

because patient was too near death. Post-mortem: Cecum so full of stool that it looked more like a large bladder than a bowel. Two chambers full of liquid feces from colon. There was a perforation of sigmoid which as you can see was practically closed by a stricture. In this stricture was a piece of chicken bone with one point protruding through perforation."

DISCUSSION

Dr. Porter: It is an old clinical observation that hydatid mole did become malignant. This case was evidently of a mildly malignant character, but was undoubtedly malignant.

Dr. M. F. Porter, Jr.: Presented a case of epitrochlear specific infection. These glands broke down and suppurated following an injury. Mercury failed to help. Salvarsan has produced some improvement. The interesting points are that this is the only evidence of specific infection which is present in the case.

Dr. G. W. McCaskey read a preliminary report of his experience with auto-serotherapy.

DISCUSSION

Dr. Bruggeman: I am still rather skeptical of the result obtained by Dr. McCaskey by this method of chemotherapy. I think that the result may be obtained by injection of salvarsan or neosalvarsan.

Dr. Drayer: I have been working with two cases of tabes dorsalis all summer and the results are marvelous. In these two cases of mine incoordination and lightning pain were absolutely relieved. The k. j. did not return.

Dr. Rhamy: I am inclined to agree with Dr. Bruggeman. There must be some impairment of nerve tissue in these cases, and it is impossible for this tissue to regenerate in so short a time.

Dr. M. F. Porter, Jr.: The second case is far from well. She is improved, however. This form of treatment as applied to tabes has produced great results.

Dr. M. F. Porter: It is a well-known fact that regeneration of nerve tissue will not take place in anything like the time reported in these cases.

Dr. Weaver: In the next ten years we will change our minds as to regeneration of tissue. The recent work of Abbe with radium is a step in the proper direction.

Dr. Beall: I do not think we ought to broach this subject in so biased a manner. The results these men report are certainly good, and they would not report them if they did not obtain them.

Dr. J. R. King and Dr. Hostettler were elected to membership in the society.

Adjourned.

G. VAN SWERINGEN, Secretary.

INDIANAPOLIS MEDICAL SOCIETY

Meeting of Dec. 2, 1913

Meeting called to order by Dr. Ferguson. Number present sixty-five.

By consent the reading of the minutes of the preceding meeting were dispensed with.

The following were elected to membership in the society: J. Wm. Wright, Fred E. Hickson, Arthur M. Hetherington, Wm. Graham McBride, Ferd. F. Weyerbacher.

Dr. Burekhardt moved that the meeting hour be changed from 8:30 to 8:15 o'clock. Carried.

Dr. Jaeger presented the following resolution: "That the Indianapolis Medical Society of Marion county declare itself opposed to any member paying any lay newspaper or magazine for publishing his photograph or biography." Carried. The secretary was instructed to send a copy of the resolution to the *Indianapolis Star*. The secretary was also instructed to send a letter to the *Indianapolis Star* commending their recent policy of excluding from their paper advertisements of so-called quack doctors, and to send letter of appreciation and commendation to the *Chicago Tribune* for the active and effective campaign that paper has been conducting against the advertising quack doctors.

PROGRAM OF THE EVENING

Dr. Jane Ketcham read a paper, subject: "The Serum Diagnosis of Pregnancy." The paper dealt with the Abderhalden test and gave the results obtained by Dr. Ketcham in a series of forty-three cases. The test for pregnancy is of value in diagnosis before the local examination can determine pregnancy; also where a second pregnancy so closely follows the first that the usual signs are absent. This test would also establish the presence of hydatidiform mole and ectopic pregnancy. The test is purely biochemical. Has no bearing at all on bacterial life. Is neither a precipitan nor agglutinin test. It is based upon the principle that the parenteral injection of foreign matter will bring into the blood serum an enzyme or ferment capable of digesting such foreign matter. Such a ferment is specific and will not react upon a dissimilar substance.

This test should be of great value in differential diagnosis in surgery and medico legal work. Dr. Ketcham reported six lueties, two nephritides, three tuberculoses and fifteen non-pregnancies all negative; ten pregnancies, seven recent abortions, all positive.

DISCUSSION

Dr. Beckman: In the operation of this test dialization has taken the place of polarization because of the difficulties offered by the latter. The test has failed often, probably from errors in technic. Asepsis must be observed or bacterial cleavage may provoke a positive reaction in a negative case. In a series of cases in the Lying-In Hospital, New York, 5.5 per cent of eighty-nine pregnancies showed negative reaction and eight per cent. of forty-nine non-pregnancies showed positive reaction. Test valuable in differential diagnosis where pregnancy is at all possible.

Dr. Will Shimer: The test opens up a new field of pathology. We know the digestive power of syncytial cells. Why do not these cells when broken away and carried into the blood stream of the mother bring about a syncytium-malignum? It is because of the anti-body formation that these cells stimulate. This test must be done by an expert to be of value.

Dr. Burekhardt: Discussed the work of Abderhalden in a general way through a period of twelve years.

Dr. W. B. Kitchen: How much time must elapse after gestation before this test can be relied on? How long after interrupted pregnancy or after labor will the test continue to be positive?

Dr. Ferguson: This test if properly applied will possibly prevent some unnecessary surgery by making a diagnosis in doubtful cases.

Dr. John Thrasher: This work brings out the principle in the detection of antigen-antibody combinations. The principle is a broad one. If we inject into the body any type of cell there will be a specific antibody formed. The detection of this antibody is the principal one on which possible diagnoses of early malignant new growths are based.

Dr. Ketcham (closing): In answer to Dr. Kitchen. The test is positive in a pregnant individual after the formation of placental tissue sufficient to react. The time is about six weeks to two months. The reaction does not occur as a rule after two weeks following the emptying of the uterus. About twenty four hours are required to make the test.

Dr. A. W. Brayton read an interesting review of Dr. Wechselman's book, "The Pathogenesis of Salvarsan Fatalities," and discussed the use of anti-syphilitic remedies in his clinic. Neosalvarsan is not a poison in itself. It will, however, when administered with mercury produce a nephritis which may be fatal. Mercury produces a tubular nephritis while salvarsan produces a vascular nephritis. Either condition in itself is not serious. Combined, however, they have produced death. The work of Wechselman teaches us to be more careful in our administration of salvarsan and mercurials. With the vast number of cases that have been treated by the combined salvarsan mercury method, without careful study of the case and particularly the kidneys, there has been considerable good fortune with us in the very few unpleasant results. Salvarsan should not be given closely following the use of heavy mercurials.

Adjourned. ARTHUR E. GUEDEL, Secretary.

Meeting of Dec. 9, 1913

In the absence of Dr. Ferguson the meeting was called to order by Dr. John Pfaff. Number present 55.

Minutes of preceding meeting were read and approved.

An invitation from Dr. George Edenharter, Superintendent Central Indiana Hospital for the Insane, was read, inviting the members of the society to attend the course of clinical lectures to be given at that institution.

Dr. Chas. E. Cottingham read the paper of the evening. Subject—"The Medical Aspect of Hyperthyroidism."

The variability of the symptoms of Grave's disease renders the diagnosis at times difficult. We may have true exophthalmic goiter without hyperthyroidism. We may have the reverse.

Treatment avails more early in the condition, before there is enlargement of the gland or exophthalmos. The far advanced condition will not respond to any treatment but surgery. The early case is amenable to other treatment.

The so-called Basedow's temperament often precedes the development or the recognition of the true disease. It is possible that this so-called temperament is no less than the true disease in an early form. Some of them recover completely; some never develop the symptoms of the later condition. The period of development varies from a few weeks to many years.

Treatment: There is a tendency toward early surgery. However, opinion is about equally divided. Eulenberg (Berlin) in observing 600 cases treated by means other than surgical, reports almost as large a percentage of cures as with surgical while the rest of the series were benefited in various degrees. Cotton

of New Jersey in reporting Mayo Clinic records, shows 75 per cent. recoveries in all persons surviving the operation but the operative mortality is from 20 to 30 per cent. By selecting cases this mortality reduced to 4 per cent.

I am unwilling to have surgery employed excepting in cases of long duration with marked enlargement of the gland.

Prolonged absolute rest in bed is a common and efficient treatment when supported by true hygienic care. Beebe's lytic serum may have some virtue as is claimed but we must wait longer for true reports. Injection of boiling water into the gland has some supporters. Pituitary and Thymus extracts are used but the effect is questionable.

I have used the Roentgen ray on fourteen cases in the past 6 years with results which warrant continuance of the method. Symptomatic recoveries in all of these but one, a case of three years' standing with marked enlargement of the gland. This patient was a school teacher and could not stop work for treatment. Some improvement at first. The thirteen cases cured required from six to twenty applications of the Roentgen rays. One patient required a hundred treatments. After two years she is in good health with heart and nervous system normal.

I have seen no bad effects from Roentgen ray treatment where it has been properly used. There is a shrinkage of the gland tissue which is permanent.

Dr. R. O. McAlexander reported two cases: Subjects—"Ovarian Tumor Simulating Appendicitis" and "Large Renal Calculus; Operation."

Case 1.—Girl, aged 8, white. Family history negative. Personal history. Usual diseases of childhood. No serious illness. Present condition: Pain right lower quadrant, constipation, vomiting, muscular rigidity. Temperature 99, pulse slightly accelerated. For two days pulse increased slightly in rapidity. Temperature as high as 101. Operated for acute appendicitis with pus. Appendix normal except for a mild peritonitis. Found tumor right ovary, size of orange; pedicle twisted. Removed. Recovery.

Case 2.—Man, aged 28. Family history negative. Personal history. Usual diseases of childhood. Typhoid at 12 years. Four weeks ago violent abdominal pain, beginning back on right side, radiating toward scrotum. For several days afterward severe chills and high fever. Tenderness over right abdomen front and back. No trouble voiding. Three weeks in bed. This was first attack of this nature. Urinalysis: albumin and sediment abundant. Many blood cells. No tube casts. X-ray gave shadow on right side. Cystoscope showed stone in bladder size of pea. Operated five weeks later. Recovery. Calculus after being dried weighed 32 grams.

DISCUSSION

Dr. C. F. Neu: So far as medical treatment of hyperthyroidism is concerned, opinions are about equally divided. Medicine and surgery give about equal results. The question is, "When do we have a cure?" We can bring about an amelioration of symptoms; but a true cure is questionable with either treatment. It is extremely difficult to remove the so-called Basedow's temperament. With the injudicious use of the x-ray there have followed cases of hyperthyroidism. The absolute rest treatment should be first tried before operating the case.

Dr. Theodore Potter: Graves' disease is a disease of the thyroid gland. We have hyperthyroidism with-

out always having Graves' disease. Excepting local symptoms of Graves' disease the symptoms are all nervous. Behind symptoms is intoxication. Behind intoxication the thyroid gland. Behind the thyroid, what? May have symptoms of Graves' disease following an acute infection of the thyroid. Real cause of the disease is still a question. In the treatment we all agree upon rest. We do not insist upon absolute rest as we should. Rest must be absolute. We have practically nothing at hand to counteract the toxins unless it be one of the sera now on the market. Variability of the disease makes statistics very uncertain. Surgical status to-day, like the surgical status of appendicitis ten years ago. Perhaps the evolution will be the same as in appendicitis. It would seem that surgery is practical in getting to the seat of the trouble as rapidly as possible. It is well to try medical treatment at first, but unless the improvement is rapid and pronounced, operate.

Dr. Hugo Pantzer: Reported two cases. 1. Full grown thyroid enlargement with symptoms of malaria. Complete recovery in about five days with disappearance of the glandular hypertrophy. Case 2. Young lady long time in hospital in preparation for operation on uterine fibroid. Had enlarged thyroid and symptoms of hyperthyroidism. Day after the operation gland had disappeared and the symptoms were gone. Few days later tonsillitis contracted and thyroid with symptoms reappeared. These receded in about two months.

(On Dr. McAlexander's cases). Temperature in tumors with twisted pedicles develops only after many days. His case after all may have been appendicitis. In reporting cases it is not at all justifiable to say "the patient had the usual diseases of childhood." That means nothing unless the particular diseases are specified.

Dr. T. B. Eastman: It is quite well known that where we have a great many remedies for a condition none of them are very good. We are reminded of the x-ray treatment for spleno-medullary leukemia a few years ago. It helped for a time, but the symptoms invariably recurred in a more pronounced form than before. We should wait a year or two before reporting cures of Graves' disease. Surgery gives about the same percentage of cures in Graves' disease as in the average surgical condition.

Dr. John Pfaff: Is there anything in the toxemia of these conditions that causes so much bleeding during operations on these patients for other conditions?

Dr. Albert E. Sterne: We are too frequently confusing symptomatic hyperthyroidism with Basedow's disease. The recovery of these conditions is apt to give our statistics too bright an appearance. Symptomatic Basedow's is often cured by the removal of a tumor elsewhere in the body. True, Basedow's is probably polyglandular in character and our lack of knowledge of the inherent pathological physiology makes progress in treatment slow. Most surgeons regard the true condition as imperative surgery and operate to relieve, not to cure.

Dr. Alburger (on Dr. McAlexander's first report): Would not a leukocyte count have differentiated between an ovarian tumor and an acute appendicitis with pus?

Dr. Potter: The therapeutic test properly applied, as it is so seldom done, is of value in the early diagnosis of Graves' disease. If the disease is present the

patient will react to a very small dose ($\frac{1}{4}$ gr. t. i. d.) of thyroid extract.

Dr. A. W. Brayton: Asked as to the national distribution of the disease. Is it a disease of civilization or not? Where does the condition come from?

Dr. W. T. S. Dodds: Grandmother and two aunts died of hyperthyroidism. Mother was operated and saved. In adolescent period let the condition alone from surgery. After this period, however, if the condition persists, operate. Regards the condition one for emergency surgery.

Dr. Alburger presented a renal calculus secured at autopsy, which was of enormous size and forming east of the pelvis of the kidneys. Dr. Gatch made a brief report on the case.

Dr. Cottingham (closing): Certain vasomotor changes in hyperthyroidism may account for the excessive bleeding in operation as suggested by Dr. Pfaff. We cannot rely too much on statistics with serum treatment for where they are employed the rest and hygienic treatment are used in conjunction. The question is "Which does the work?" The x-ray will give very good results in selected cases. It will not cure them all. Neither will any other treatment. Those cases which have but little thyroid enlargement will respond as a rule very well to x-ray treatment. X-ray results if the treatment is conducted properly will give as good results as surgery. The far advanced cases should be operated, for there is nothing else that will relieve them. Dr. Eastman spoke of the status of x-ray treatment in spleno-medullary leukemia a few years ago. I will say that it still stands the best treatment in this incurable condition that we have, and it will prolong life a number of years.

Dr. McAlexander (answering Dr. Pantzer): In this case there was no appendicitis. My experience has been that we do get early temperature in tumors with twisted pedicles.

Meeting adjourned.

Meeting of Dec. 11, 1913

DR. W. H. WISHARD MEMORIAL MEETING

The society met in memorial recognition of the life and work of Dr. W. H. Wishard.

In the absence of Dr. Ferguson, Dr. Allison Maxwell was asked to the chair.

The opening memorial address was read by Dr. F. C. Heath.

Brief eulogies were delivered by the following: Dr. L. D. Watterman, Dr. E. F. Hodges, Dr. G. V. Woolen, Dr. W. T. S. Dodds, Dr. S. E. Earp, Dr. Theodore Potter, Dr. D. F. Lee, Dr. A. L. Wilson, Dr. F. R. Charlton, Dr. Frank B. Wynn, Dr. A. W. Brayton, Dr. Albert E. Sterne, Dr. Allison Maxwell.

A letter from Dr. A. C. Kimberlin, who was unable to be present, was read by Dr. Potter.

Dr. H. O. Pantzer, who was at home ill, made a brief expression through the chair.

Abstract of all addresses.

Dr. Wishard was a man in the greatest sense of the word. His was a personality strong and forceful. Always kindly and ever ready with a word of encouragement at the right time. Of never failing judgment. Possessed of an ever ready wit and keen sense of humor. Always kind and generous in his work. Always thinking first of the welfare of his friends and patients. It was well said that to find a patient of Dr. Wishard and there was found his friend.

Starting to practice his profession in this community when Indianapolis had a population of but six hundred people, he was beset with many hardships in his work, all of which he met most cheerfully. He was fond of relating tales of the earlier days in the practice of medicine, tales usually of profound historical interest. He practiced long and hard and kept pace with the times even after he had ceased his active work. His home life was most beautiful and he was happy to the last. His whole life was one to be emulated by every man. To follow him was to live happily and well. We are all beteter for our having known him.

Dr. A. E. Sterne moved the appointment of a special memorial committee. Carried. The chair appointed Drs. G. V. Woolen, A. E. Sterne and W. T. S. Dodds. This committee is to prepare a special memorial for Dr. Wishard. Meeting adjourned.

ARTHUR E. GUEDEL, Secretary.

Meeting of Dec. 16, 1913

Meeting called to order by Dr. Ferguson at 8:15 o'clock. Present 50.

Reading of minutes of preceding meeting dispensed with by consent.

Application for first reading Dr. James W. Duckworth. Applications for second reading, Drs. George W. Bowman and Jeremiah A. Swailes.

Dr. W. T. S. Dodds reported for the W. H. Wishard memorial committee, the resolution, published elsewhere in this number of THE JOURNAL, being adopted.

Dr. E. E. Padgett read the paper of the evening: Subject—"Present Status of the use of Pituitrin in Gynecology and Obstetrics."

Pituitary extract stimulant to all plain muscle, especially uterus. It should be used with utmost discrimination. Its indications should be carefully studied. Dangers, deep laceration of the cervix, death of the fetus and uterine rupture. Action, if at all, begins in from five to fifteen minutes after injection. Should be given intramuscularly. Dose, 2 to 4 c.c. Action short-lived and dose may be repeated at short intervals.

Ampules or vaporoles should be used. Three reliable preparations on the market. Ordinary action 2 gm., decided action 4 gm. dose. Effect lasts about thirty minutes. May be combined with ergot or with heart stimulants. Has no place in normal obstetrics being limited to primary or secondary inertia, post-partum hemorrhage and cesarean section. Produces strong intermittent contractions but not tetanic.

Given in the first stage of labor the drug has caused fatal compression of the fetus, premature separation of the placenta and deep cervical tears. Action more positive in multipara. For post-partum hemorrhage probably not so reliable as ergot. Should never be used unless preparations for immediate delivery under anesthesia complete.

In medicine and gynecology (Marx of New York). In subinvolution (selected cases) one or two injections daily give rapid results. As a temporary means of controlling hemorrhage from uterine fibroid. Hemophilic bleeding from the uterus. Possibly of value in post-partum infection as it will reduce the size of the uterus and lend tone to the flabby muscle.

Dr. Bernays Kennedy reported a case of "Coincident Intra-uterine and Extra-uterine Gestation." Reviewed literature. Patient, nullipara. Missed two menstruations: slight anemia; malaise; distress in

right iliac region. Usual signs of pregnancy. After short time patient developed unmistakable signs of ruptured ectopic and abdomen was opened. Left ruptured ectopic found and cared for. Uterus larger than normal but was considered collateral with ectopic pregnancy. Recovery uneventful. Two months later appeared for examination and was found to be four months pregnant which coincided with her menstrual history. Five months later delivery of a full term babe; normal labor. Baby living and well; mother well.

Dr. E. D. Clark reported a case of "Extra-uterine Gestation at Term." Patient aged 28. Menstrual history normal. Married at 16. Two children, 12 and 8 years of age, living and well. Third pregnancy, one year after birth of second child. Was accompanied with much nausea and vomiting. Accidentally terminated at three months. Nine and one-half months before admittance to the hospital she became pregnant again. Much nausea and abdominal pain. Obstinate constipation. Observed fetal movements between fourth and fifth months. Three weeks before admittance to hospital had a gush of fluid "about a cup full," at the time thought to be amniotic fluid. She felt no movement afterward. Very uncomfortable owing to her size; nausea and exhaustion; temperature 100; respiration 25; heart and lungs normal. Appearance of pregnancy at term. Examination showed uterus of normal size, cervix dilated, gray necrosis of mucous membrane, foul discharge. Repeated attempts had been made to bring on labor by dilatation, etc., which might account for the infection in the uterus. No fetal heart sounds during past three weeks. Operated; large tumor filling the abdomen. Uterus and appendages not connected with it. Adhesions to tumor extensive. Fluid in tumor was drawn off with large trocar. Sac opened and a full-term child weighing 8 pounds was removed. Placenta was found behind the uterus attached to the rectum and sigmoid. Because of infected uterus this and the tubes were removed. This made removal of placenta easier. Abdomen closed. Recovery good. Left hospital sixteen days after operation, Feb. 2, 1911. Mother recently reports excellent health.

DISCUSSION

Dr. John Cunningham.—(Pituitrin.) It is a powerful drug. Can do much harm or much good. Personal results not satisfactory. Must choose cases carefully and use caution in administering. It is often used to stimulate uterus when uterus needs only rest.

Dr. Louis Burckhardt.—(Pituitrin). The drug was formerly thought to resemble adrenalin in action. Used locally in hay fever, when it first appeared. Very enthusiastic supporter of proper use of the drug in obstetrics. Must be sure that birth canal is clear and large enough for delivery before administering it. We must be ready with an anesthetic in case the action of the drug is too strong. Its use makes the necessity of forceps deliveries less frequent. We may get a post-partum uterine inertia following use of pituitrin which possibility makes it advisable for operator to wait for a considerable period after delivery to be sure that there is not going to be a relaxation of the uterus and hemorrhage.

Dr. Thomas B. Noble.—Reported a case in which he used pituitrin during cesarean section. Uterus would not contract after removal of child. Remained a bleeding flabby mass. Hypodermic of pituitrin given and within one minute uterus contracted so forcibly that it was blanched. This contraction persisted and

abdomen closed. No further trouble. Differs from similar observations with ergot inasmuch as the action is more forceful and vigorous.

Dr. Harry Jacobs.—Reported series of forty cases in which pituitrin was used. Most of them normal. Waits for three fingers' dilatation. After its administration labor is quickly terminated. May have some effect on the child in-utero. Reported one case in which first injection had no effect. Repeated one hour later; after this fetal movement ceased. Next morning mother was delivered of a dead baby.

Dr. Harry Bonn.—Reported case of coincident intra-uterine and extra-uterine gestation observed by Dr. J. Rihus Eastman.

Dr. C. E. Ferguson.—Pituitrin is a great aid in obstetrics if properly applied. Reported a miscarriage at six months in which there was a lack of uterine contractions. The placenta would not be expelled. Closely following administration of pituitrin there occurred a strong contraction with expulsion of placenta. Reported case of cesarean section in which after removal of child uterus remained soft and bleeding. One injection of pituitrin brought the uterus down hard. Has also noticed relaxation of the uterus after the effect of the drug has passed. Reported case: Mother of six children. Transverse position of fetus. Could not do version. Labor then began. Examination showed hand in os. Chloroform administered and foot pulled down. After half an hour there had been no pain. There was wide dilatation of the os. Pituitrin administered and with the aid of the resultant contraction the babe and placenta were secured in eight minutes. The danger in a case such as this would be the contraction of the os about the neck of the babe after the body had been born, producing asphyxia. In this case the dilatation was sufficient to permit the head to be pulled rapidly through.

Dr. Padgett (Closing).—I believe that pituitrin is a good drug but it must be used with care and discretion. Adjourned. ARTHUR E. GUEDEL, Secretary.

Meeting of Dec. 23, 1913

Meeting called to order by President C. E. Ferguson. Present 140. Regular order of business was dispensed with.

The program, a Holiday Smoker, consisted of the following:

Dr. Walter N. Sharp. "A Half Hour with the Camera in the Vicinity of Old Concord, with a Description of the Battle of the Old North Bridge."

Dr. Sharp presented with the lantern many beautiful photographs from about Old Concord, which he had taken during his residence in that vicinity and related in a most interesting manner the history of various points of interest shown. Dr. Sharp's presentation was of extremely high order and was well appreciated by the audience.

Mr. Walter P. Pfaff entertained well with Riley readings.

Mr. Kin Hubbard finished the program with a "Chalk Talk." Along with a beautifully artistic portrait of Miss Fawn Lippencott, Mr. Hubbard aptly portrayed a number of our prominent and otherwise physicians, finishing with one who is not a member of our society, the Quack Doctor.

The entire entertainment was most interesting and was well received as were the cigars and cigarettes, personally selected by the secretary.

Meeting adjourned.

ARTHUR E. GUEDEL, Secretary.

DELAWARE COUNTY

Delaware County Medical Society met in Sunday-school room of Jackson Street Christian Church at 3 p. m. on Friday, January 2, with President D. M. Green presiding. Reading of minutes of previous session and consideration of annual financial report of secretary-treasurer. Rev. T. J. Johnson, pastor of Normal City M. E. Church, explained to the physicians in attendance his purpose of preparing a series of lectures along the line of social evangelism. Rev. Johnson has purchased the manuscript of "Damaged Goods" and will base one of his lectures thereon. He also uses "The Servant in the House," "Passing of the Third Floor Back," "The Next Religion," etc. These addresses, also several lectures on social purity, adapted to the needs of varied and selected audiences, will be ready for delivery in the near future.

The principal speaker of the day was Dr. Chas. E. Barnett of Fort Wayne, who gave a stereopticon lecture on "Diagnosis, Pathology and Surgery of Infectious Diseases of the Genito-Urinary Tract." A collection of slides showing normal anatomy of genito-urinary system were of great interest and enhanced the understanding of the pictures of some really remarkable pathological conditions that followed during the course of the address.

Dr. Barnett manifests an enthusiastic interest in his subject, and while the address was of more importance to surgeons than physicians, many interesting suggestions were gleaned that are of value to all classes of practitioners.

In part, the essayist said that the subject of genito-urinary infections covers a much broader field than formerly. All varieties of cystitis used to be simply "inflammation of the bladder." We now know that it is nearly always a sequela following a variety of causes. The importance of the subject of genito-urinary infections may be estimated by reports from undoubtedly reliable statistics which indicate that 80 per cent. of all men have gonorrhea at one time or another, and that 75 per cent. of gynecological surgery is the result, directly or indirectly, of venereal infection. The bacilli coli communis and tubercular germs are also always on the alert for an opening, and probably all chronic infections become of the mixed type.

Great majority of serious results due to infection of the male genito-urinary tract become so because of lack of drainage; because of the small and tortuous canals block occurs which produces inflammatory action, which in turn favors development of further occlusion, and this makes the condition so difficult and tedious to cure. Infection spreads by two methods: direct contact (continuity) or through the blood (hematogenously), consequently cure may be effected in one of two ways, by direct drainage out, or because of a corrected pathology. Epididymitis indicates infection of bladder-neck region. For acute epididymitis best treatment is to cut down on capsule and make multiple small stab wounds which release straw colored fluid. Insert a small rubber drain and close. When patient awakes from his anesthesia he will be free from pain, which does not recur, and term of involvement is shortened.

Infection of prostatic region is always serious because prostate is full of little ci-terns that become reservoirs for infectious germ growth. Death following prostatectomy is largely due to pus which has

entered the veins opened during operation. It is an anatomical fact that the ejaculatory duct passes through the prostate, therefore it is impossible to remove the prostate and leave the duct intact.

Tubercular involvement of kidney is always a blood-borne infection. Bacilli will nest in Malpighian bodies and extend downward. We used to hear much about ascending infection; we undoubtedly have such, involving ureters, but when infection strikes epithelium of kidney, an effective barrier is reached. An occasional renal tuberculosis may be benefited by tuberculin, but it is generally unsatisfactory.

Autogenous vaccines are comparatively easy to make and are of value in nearly all infections. A simple method of preparation is as follows: Add 1 dram of pus to 1 ounce of salt solution and sterilize at a temperature of 140 F. for from fifteen to thirty minutes. Then add 1 drop of lysol and filter through cotton. The only objection to this method is that one cannot tell exact strength of vaccine; but dosage may begin with 1 drop and increased till proper reaction occurs.

H. D. FAIR, Secretary.

ELKHART COUNTY MEDICAL ASSOCIATION

Meeting of January 8

January meeting called to order by secretary at 8 p. m., in Dr. Staufft's office, Elkhart. Dr. D. L. Miller, Goshen, was elected chairman pro tem. Minutes of December meeting read and approved. Motion carried that Dr. Burton D. Myers of Indiana University be asked to address the society and guests in the near future and that a committee of three be appointed to complete arrangements for this meeting. Drs. E. M. Hoover, C. W. Haywood and J. A. Work, Jr., were appointed by the chair.

Application of Dr. S. A. Edmonds of Goshen for membership was read and referred to the Board of Censors.

Bills were allowed as follows:

| | |
|--|---------|
| Dec. 4, '13—Expenses of Alburger meeting, Goshen | \$19.00 |
| Dec. 1, '13—Postage and stenographer..... | 6.75 |
| Dec. 1, '13—Envelopes | 4.00 |
| Elkhart Printing Co.— | |
| Sept. 3, '13—100 programs..... | 4.50 |
| Nov. 13, '13—Printing on 260 postal cards.... | 4.40 |
| Dec. 31, '13—1,000 letter-heads..... | 4.00 |
| Total | \$42.65 |

Dr. A. A. Norris presented a paper on "Knock-Knees and Bow-Legs." Dr. Wallace Blanchard has called attention to the fact that rachitic deformities are common findings among immigrants, especially those from the south of Europe. Genu varum and genu valgum may or may not be due to rachitis. Like dentition and adolescence, eburnation may be early or late. Deformity consists in wide exaggeration of normal curves.

Typical of first stage in genu varum, there occurs a wide outbending of the normal curve in the lower third of femur. Next in order of occurrence, bend in upper third of tibia becomes exaggerated and subsequently lower third of tibia curves outward with a completion of condition known as bow-legs.

Genu valgum follows a similar well-defined succession of deformities: first an inward bend of tibia,

from three to six centimeters below head; second, an inward curve involving the remaining length of the tibial shaft, accompanied by outward rotation. Fibula shows a sharp inward curve in its lower third, which tends to obliterate the normal space between tibia and fibula. Body weight is thus transferred to outer condyles; external hamstrings are shortened and internal hamstrings overstretched—a typical picture of advanced genu valgum.

Treatment: Spontaneous cure in certain well-nourished cases. Best treatment of moderately bowed legs in an otherwise healthy child of two years is to apply a plaster-of-Paris dressing and allow to harden while holding the bones in a corrected position. Child is allowed to walk on encased legs and two months will effect a cure.

Osteotomy and osteoclasis are used for the correction of marked rachitic deformities. Latter is operation of choice, though Binnie's Surgery gives preference to osteotomy. According to Blanchard, disadvantages of osteotomy are as follows: (1) Time required for operating; (2) danger of infection; (3) time, care and expense for antiseptic precautions; (4) pain which always accompanies an open wound; (5) possibility of delayed union. In bow-leg the apex of most prominent curve is selected for point of operation and overcorrection is carried to a degree sufficient to relieve all deformities involved. Rapid union follows up to eight-second osteoclasis and in six weeks patient is walking on straight legs.

DISCUSSION

Dr. C. W. Frink, Elkhart: Italian babies are swathed in a bandage eight to ten feet long. Italian mothers do this to keep bones of legs straight. Rachitis is a predisposition among foreign population. Dr. Frink's experience has been with bow-legs type of rachitis. He uses an apparatus fitting around pelvis and feet with connecting springs which bring long bones back to normal curves. Hospital care is treatment par excellence.

Dr. B. F. Kulm, Elkhart: Has observed two cases with interest. Both were native-born Americans. One child died of diphtheria; other is still living. Both were cases of bow-legs to a marked degree. The child surviving showed a gradual straightening of bones so that now the individual, a young man, has no apparent deformity. Some cases should be corrected by operation.

Dr. J. A. Work, Sr., Elkhart: An apparently well-nourished child may be in reality badly fed—kept too long on one kind of food—so that bow-legs develop. A child showing a tendency to rachitis should have an increase in minerals in diet.

Dr. James Mathews, New Paris: The fact that the bones grow better by use may be explained by localized congestion of bones on their inner surface.

Dr. D. L. Drees, Goshen: Change diet in child showing rachitis. The mother should be instructed to press on bones at the right place every day; eventually straightening will result.

Dr. G. W. Spohn, Elkhart: Asked essayist why a child with bow-legs is born to parents with perfectly straight legs and then the condition becomes corrected spontaneously after use.

Dr. I. J. Becknell, Goshen: Sayre's splint. Has had a few cases in young children which he has corrected by firm pressure, using plaster-of-Paris dressings and splints.

Dr. E. M. Hoover, Elkhart: Many bow-legs in his community when he was a boy. Woman brought her baby daughter to him not long ago. She was much exercised about the child's bow-legs. Dr. Hoover reminded her that the child's father had been very markedly bow-legged when a babe.

Dr. P. B. Work, Elkhart: Used Gratin osteoclasts in several cases and results were good. Quickness of operation is essential to obviate injury to soft parts. In treating almost any deformity, overcorrection is a prerequisite to obtain good results. Amount of plaster used in orthopedic clinic is remarkable. It is used for almost everything. Correct way to make plaster-of-Paris bandages is to rub dry plaster into erinoline until all meshes are full. It is then rolled loosely so that upon soaking bandage before application it becomes wet throughout readily and evenly. Layers are applied until desired thickness is obtained, each being rubbed so that cast is almost homogenous. In removing a plaster dressing, bandage is wet in a line the full length, water is dropped just fast enough to soak it through, then with a sharp knife it cuts like butter. Protection of the skin is a commonly neglected item in applying plaster bandage. Stockinet is applied next to the skin and sheet wadding outside, felt over the prominences. Cases so treated very infrequently develop "cast sores."

Dr. C. W. Haywood, Elkhart: Discussed epiphyses and epiphyseal union. Ossification of epiphyses occurs several years after birth. Osteoblastic cells reach out at irregular intervals. In osteoclasts in children near a joint, it is possible to do marked injury—possibly irreparable injury to these cartilaginous unions. Danger of epiphyseal separation.

Dr. H. O. Stauff, Elkhart: Saw many interesting cases in Dr. Lorenz' clinic. In Vienna a large percentage of children have rickets. Seen at various ages. Spontaneous rachitic fracture is frequent. Always the question of a certain case being a syphilitic spontaneous fracture. The professors of Vienna say inheritance does not play a part in rachitis. The mode of living is at fault. In Vienna every new baby is bound to a pillow and changed every day. So snugly are they bound that a depression is found where arms lay firmly against chest. A matter of custom. In Lorenz' clinic, surgeon fractures the bones manually on an inverted V-shaped block. Legs are then put up in plaster dressing. Strips of gauze to be drawn up and down every day are placed next to skin for the prevention of "cast sores."

Dr. A. A. Norris, closing: Literature of ten or twelve years ago contained a liberal and acrimonious debate about splints. Change of climate from south of Europe to that of Chicago may be a factor in etiology of rachitis. Fracture of bones in case of these children occurs with a distinctly audible snap—the bones are older than the child. In treatment of knock-knees, fracture of femur is done. In bow-legs fracture is made below knee. Time of choice: Child $3\frac{1}{2}$ to 4 years of age—after bone has hardened. Less hemorrhage and less comminution when fracture is done with speed. Faulty diet and general mal-nutrition is responsible for rachitis. Normal babies are born with some degree of bow-legs which straighten gradually. Primary anesthesia is all that is necessary for osteoclasts.

JAMES A. WORK, JR., M.D., Secretary.

GRANT COUNTY

Meeting of December 23

At the regular meeting of the Grant County Medical Society on December 23, the following officers were elected for 1914: President, G. D. Kimball; vice-president, L. H. Eshelman; secretary, J. E. Johnson; treasurer, M. T. Shively; censor, O. M. Davis.

Meeting of January 27

The Grant County Medical Society met in regular session January 27. Dr. Braunlin of the Soldiers' Home presented a case of carcinoma of the face treated by the paste method. He gave in detail the method followed at the Home Hospital in the treatment of cases involving the eyelids, lips, palate and cheek. The arsenical paste has given satisfactory results in the treatment of all slow healing ulcers and lupus.

The new president, Dr. G. D. Kimball, read the customary president's address.

The chief paper of the evening was read by Dr. A. A. Hamilton on "Fees and Fairness." Dr. Hamilton took the stand that the objections against the division of fees originated with the consulting specialist.

Society adjourned to meet in its new quarters in the Marion Public Library on the fourth Tuesday in February. Adjourned.

J. E. JOHNSON, M.D., Secretary.

HANCOCK COUNTY

The Hancock County Medical Society held the first meeting of the year at Greenfield, January 8. At this meeting an old record containing the minutes of the organization meeting of the society, held Jan. 6, 1874, forty years ago, was read, showing that there were fourteen physicians present, not one of which is now living. At that meeting, forty years ago, Dr. J. B. Sparks read an essay on purulent pneumonia, and the coincidence was that this same subject was discussed by Dr. Emerson of Indianapolis at this recent meeting of the society.

Following the business session a banquet was served.

Adjourned.

J. L. ALLEN, M.D., Secretary.

HOWARD COUNTY MEDICAL SOCIETY

The Howard County Medical Society met at the Carnegie Public Library, Friday morning, Jan. 2. The meeting was called to order by the president, who introduced the new officers for 1914: LaMar Knepple, president, and Charles J. Adams, secretary-treasurer. The essayist not putting in an appearance the business at hand was transacted.

It was brought to the attention of the society that Howard county was not mentioned in the call for the district meeting.

There was a fair attendance and the outlook for the society for 1914 is good.

CHARLES J. ADAMS, Secretary.

JENNINGS COUNTY

Meeting of December 31

A short business meeting of the Jennings County Medical Society was held December 31, electing officers for 1914 as follows: President, W. H. Stemm; vice-president, W. A. Wildman; secretary-treasurer, John

H. Green; censors, D. L. McAuliffe, W. J. Mitchel and M. F. Daubenheyer; delegate to state meeting, O. Gaddy; delegate to fourth district meeting, W. H. Richardson.

Minutes of last meeting were read and approved.

Adjourned. JOHN H. GREEN, M.D., Secretary.

Meeting of January 28

Meeting held in office of secretary, J. H. Green, January 28, with seven members present.

Dr. C. C. McFarlin of Zenas presented the following clinical case: Male; aged 27; divorced; family history good. Patient stated while taking bath, December 16, he scratched the glans with his finger nail and a small sore developed. Denies having had sexual intercourse in past year. Examination revealed mucous patches in mouth, a general papular eruption, cervical and inguinal glands enlarged and moist papules about genitals. Diagnosis, lues.

Dr. McAuliffe reported in detail the attack of appendicitis from which he recently suffered.

Adjourned. JOHN H. GREEN, M.D., Secretary.

LAKE COUNTY

Regular meeting of the Lake County Medical Society was held at the Gary Commercial Club, Thursday, January 8, President J. W. Idings presiding. Thirty-four members present.

Minutes of preceding meeting read and approved.

Applications for membership presented by Maurice Loebell, Gary, and M. A. Given, East Chicago. Upon a favorable report of Board of Censors motion carried that secretary cast ballot in favor of their election.

A communication from the extension division of the Indiana University was read and referred to the program committee. Communication from secretary of the Indiana State Board of Medical Registration and Examination, concerning illegal practice, was read and referred to the Gary Medical Society.

On motion the by-law relative to the hour of meeting was changed to read: "The hour of meeting shall be 7 p. m."

Dr. I. J. Propper presented a case of multiple lipoma.

Dr. J. C. Gibbs of Crown Point presented a paper on "Neuralgia and Psychotherapy." Neuralgia is one of the most common symptomatic disorders and is yet frequently overlooked. Pain is the cry of a nerve in distress and should warn us that something is wrong. Differential diagnosis between neuralgia and other pains is often difficult. The cervicobrachial, cervico-occipital and lumbo-abdominal are probably the most frequently unrecognized. We too often term a pain as rheumatism and proceed to prescribe salicylates, when, in fact, these pains are neuralgias. Such methods increase the work of osteopaths and chiropractors. Cabot says: "Let us never use the word rheumatism unless there is evidence of acute infection, with distinct and predominant involvement of joints." Neuralgic pain is always confined to the course of one of several nerves and rarely involves a joint. Lumbo-abdominal neuralgia has often been diagnosed as appendicitis, due to spasm of the muscles overlying that organ. Careful examination in these cases will show tenderness somewhere along the intervertebral exits of these nerves. Intercostal neuralgia is sometimes diagnosed as pleurisy or heart disease. In the treatment of chronic neuralgia no agent gives such uni-

versally good results as psychotherapy. Abrams of San Francisco has done more work along this line than any other person. In applying this treatment we may use ice and salt, ethyl-chlorid or sulphuric ether. Best to begin freezing with ethyl-chlorid and continue with sulphuric ether. Latter agent may be applied with hand atomizer or compressed air spray. Freezing should be confined to tender spinous processes and tender areas over or near intervertebral exits of affected nerves. Freezing should be continued for several minutes and is repeated one or more times. A number of cases were cited showing relief obtained through psychotherapy.

DISCUSSION

Practically all of the discussants admitted that the subject was new to them, and for the most part, confined their remarks to the asking of questions.

Dr. Oberlin: Stated that he had effected a cure of sciatica in his own case by means of cold water applied over the affected nerve and wearing of chamois underwear.

Dr. Gibbs: In answer to the various questions stated that he had not had much experience in the use of this treatment in facial neuralgia. In cases of neuralgia headache, freezing at base of skull along points of exit of cervico-cerebral nerves had repeatedly given relief. He believes efficacy due to obtunding of affected nerves. In Dr. Schaible's case of torticollis, suggests freezing along point of exit of spinal accessory nerves. As to sloughing, has had none.

Dr. Gibbs then demonstrated the use of this agent.

Dr. T. B. Templin presented a paper on "Some Diseases Causing Chronic Indigestion with Differential Points." Stomach trouble one of the most common ailments. The first thought of the physician in these cases—is it primary or secondary? Chronic indigestion is a common symptom in ulcer of stomach and duodenum, gall-bladder disease, chronic appendicitis, carcinoma of stomach, pancreatitis, tuberculosis (particularly pulmonary), Bright's disease, syphilis and pernicious anemia. Essayist discussed first form in particular. In chronic ulcer, attacks come on for years. Appetite remains good and eating brings relief from pain. Attacks become more frequent and are more prolonged. A most important point is this regularity of attacks and relief. Appearance of complications causes a change in symptoms. Food may not relieve, but may cause pain. He divides gall-bladder disease into three classes. 1. Those with mild symptoms. 2. Those with more prolonged symptoms, and with dull severe pain in liver region. 3. Those with gall-stones, colic, etc. The most common cause of gastric disturbance is probably chronic appendicitis. While pain is prevailing symptom, it does not reach such a severity as in gall-bladder disease. Clinical history of cancer divided into: (1) Those preceded by prolonged ulcer history. (2) Those in which more or less gastric disturbance has been complained of, but in which there have been years of freedom. (3) Those with no clinical history preceding malignant symptoms. First group gives typical history of gastric ulcer. In the second and third classes diagnosis may often be made at first examination. In these cases we find rapid wasting, cachexia, loss of appetite, weakness, vomiting and no HCl. It is in these cases that the test meal is most efficacious. With facilities and knowledge available for management of these conditions ignorance on

part of physician is unpardonable; neglect almost criminal.

DISCUSSION

Dr. H. M. Hosmer: Suggests pelvic conditions frequently produce same symptoms as described in paper.

Dr. W. F. Howat: This is a timely paper. Relative frequency of these cases varies in different localities. In Lake county chronic appendicitis is chief offender, while in other places gastric ulcer seems most common. Periodicity of pain coming on at a certain time is diagnostic. One nearly constant sign is the fact that there is one point of tenderness that seldom varies. It usually lies somewhere between the costal arch and median line. When once elicited it is nearly always constant. Possibly none of us pay enough attention to examination of gastric contents. Calls attention to a very valuable point noted in paper—food does not relieve pain in case of gall-bladder disease. Another valuable point, described by McKenzie, is that of shoulder pain, at top and not subscapular. This is nearly always present in gall-bladder disease and in chronic pleurisy. Chronic appendicitis may cause very aggravated gastric symptoms. He likens appendix to a spoke in a wheel.

Dr. C. M. Reyher: Cites cases of inguinal hernia with omentum enclosed. Suffered with gastric disturbance all his life. Case was operated and stomach symptoms immediately ceased. Pain of gastric ulcer is frequently relieved by vomiting. This is not true in gall-bladder disease.

Dr. Temple, closing: Field larger than anticipated when planning paper. Refers to angina in gall-bladder cases. Cites one case in which most pain was over heart. Gall-bladder was drained and relief was immediate. About two years later pain over the heart returned, gall-bladder was again drained and relief again obtained.

Adjourned. E. M. SHANKLIN, M.D., Secretary.

MADISON COUNTY

The society met in the public library in Anderson, Tuesday, Jan. 27, 1914, at 4 p. m., with seventeen members present. Vice-President Dr. L. F. Schmaus called the meeting to order. Dr. James S. Taylor and Dr. Wm. S. Tomlin of Indianapolis, and Dr. Kimbrell of Anderson were guests of the society. Application for membership of Dr. H. E. Ward was reported favorably by the board of censors.

The serious illness of the president of the society, Dr. S. C. Newlin, was reported.

Dr. Taylor of Indianapolis read a paper on "A Special Plan in the Routine of Infant Feeding." He classified feeding cases as follows: First, strong, vigorous, well-nourished, born of healthy parents; second, frail, emaciated, ill-nourished, born of alcoholic, syphilitic, tuberculous or otherwise diseased parents. To this he added the infant that is born with favorable chances, but by improper feeding soon develops disorders of nutrition. Dr. Taylor preferred cow's milk—it must be clean and fresh. Milk from common cows preferred to those highly bred. He took the caloric standard and modified the milk from that. He takes cow's milk because it furnishes a fresh live cell and 95 per cent. of children thrive on it, and this is modified to suit the child.

Dr. Tomlin read a paper on "The Chronic Suppurating Ear, Prophylaxis and Treatment." Dr. Tomlin said that the dividing line between acute and chronic

suppuration in the ear is based on lapse of time and pathology. First consideration in prophylaxis of chronic inflammation lies in preventing the acute one. Provide free drainage in all suppurative cases. Douches and powders produce chronicity. A few applications of phenol and glycerin thins flow, reduces edema, pain and itching, then plain gauze should be gently inserted without friction and left touching drum without pressure. Dr. Tomlin covered the subject in a way that was of great help to the general practitioner.

Adjourned. ETTA CHARLES, M.D., Secretary.

MARSHALL COUNTY

The Marshall County Medical Society met December 29 at 1:30 p. m. at the City Library, with thirteen members present.

Minutes of previous meeting read and approved.

Dr. Holtzendorff read a paper on "Curettage," all members present taking part in the discussion.

The following officers were elected for 1914: President, Dr. L. D. Eley, Plymouth; vice-president, Dr. E. E. Parker, Culver; secretary-treasurer, J. J. Hardy, Plymouth; censor for three years, Dr. C. N. Holtzendorff, Plymouth.

Adjourned. JOHN J. HARDY, M.D., Secretary.

The Marshall County Medical Society met January 29 with thirteen members present and one visitor; President L. R. Eby presiding.

The society gave a vote of thanks to the editor of the *Plymouth Republican*, Mr. S. E. Boys, for his honorable stand in refusing to accept the advertising of the United Doctors.

Dr. S. M. Brockover read a paper on "Endometritis." Adjourned. J. J. HARDY, M.D., Secretary.

MIAMI COUNTY

A brief report of the Miami County Medical Society for 1913: Active members, 30; honorary members, 1; regular meetings, 8; special meetings, 2; picnics, 1; dinners, 1; average attendance, 14; maximum attendance, 17; minimum attendance, 11; visitors, 4; scientific papers, 9; clinical cases, 1; reports of cases, 4; pathological specimens, 1; new members, 3; deaths, 1; active members in 1912, 28.

There were several events of interest to the society during the year of 1913. A devastating flood visited Peru and vicinity in March with a death toll of eleven and great damage to property. Members of the society devoted their time to relief of the sick and to carrying out of sanitary measures for the community. A United States Public Health and Marine Hospital Service physician, Dr. Hugh DuValien, was in charge for several days and the work was energetically pushed by a company of the Indiana National Guard from Frankfort under command of Dr. Chittick of that city. Public free anti-typhoid vaccination was offered at the court house for six weeks to all who applied. It is interesting to note that very little disease resulted from the flood, contrary to all expectations.

As a direct result of the flood, the hospital presented to the city of Peru by the will of the late A. N. Dukes, was opened as an emergency hospital for refugees, and has since been maintained by subscription and revenue from pay patients as a permanent

institution. A hospital benefit baseball game was played between the physicians and dentists during the summer.

The Eleventh Councilor District Medical Society held its autumn meeting in Peru and was largely attended.

Through death the society lost one of its oldest and most respected members, Dr. Edwin M. Bloomfield.

The annual meeting was held in December. At that time a bid was made to do the county jail and poor asylum work, the revenue to go into the society's treasury. The bid was accepted and this with the annual dues should put the organization in excellent financial condition in 1914.

A banquet was held for the members and their ladies. This was paid for out of the society's exchequer, it being the society's policy to guard against hoarding.

The officers elected for 1914 are: President, H. E. Line; vice-president, Brown McClintic; secretary-treasurer, M. A. McDowell; censor, C. J. Helm.

BROWN MCCLINTIC, M.D., Secretary.

POSEY COUNTY NEWS NOTES

Posey County is located in the extreme southwest corner of the state and it has a county medical society—but does not contain a "Hoop-pole Township," as generally supposed.

Dr. U. G. Whiting has been confined to his home for some time with a severe attack of tonsilitis.

There are about fifty cases of small-pox in Posey County. In the two towns of New Harmony, Poseyville and Cynthiana there are a number of cases, with two cases in Mt. Vernon, but with the efficient work of our County Health Commissioner, Dr. D. C. Ramsey, we hope to have the situation under control in a few weeks. Across the Ohio River in Kentucky the disease is very prevalent and it is from that source that a good many cases of infection came.

Dr. Edwin Rinear was appointed physician to the infirmary at the last meeting of the Board of County Commissioners.

Dr. D. C. Ramsey was appointed County Health Commissioner in place of Dr. Hardwick, who has served as county health officer for fifteen years.

Owing to the peculiar geographical situation in Posey County, the Posey County Medical Society meets only four times a year. It would meet monthly if it were not for the fact that Mt. Vernon, the principal town and county seat, is located in the extreme south end of the county, and New Harmony, Poseyville and Cynthiana are in the north end of the county, and it makes it impossible to muster up a good attendance oftener than every three months; hence the physicians of Mt. Vernon two years ago organized a society known as the Mt. Vernon Medical Society.

The Mt. Vernon Medical Society met in the offices of Dr. D. C. Ramsey, January 28th. This being the annual meeting of the society, the following officers were elected: Dr. C. H. Fullenwider, president; Dr. J. E. Doerr, vice-president, and Dr. J. R. Ranes was reelected secretary-treasurer. Mt. Vernon Medical Society was organized in February, 1912, very largely through the untiring efforts of Dr. Edwin Rinear. The purpose of the society is for the advancement of medical and surgical science and the promotion of good fellowship.

SPENCER COUNTY

The Spencer County Medical Society met at Rockport, January 2, with eight members present.

The following officers were elected for 1914: President, Dr. S. P. Gwaltney; vice-president, Dr. J. C. Glockman; secretary-treasurer, Dr. H. Q. White; censor, Dr. S. W. Stuteville.

Dr. Eva J. Buxton reinstated to membership.

Adjourned. H. Q. WHITE, M.D., Secretary.

TIPTON COUNTY

The Tipton County Medical Society met at Tipton, December 30, and elected the following officers for 1914: President, S. M. Cotton of Goldsmith; vice-president, A. W. Gifford, Tipton; secretary-treasurer, W. F. Dunham, Kempton.

The remainder of the evening was devoted to the discussion of plans for establishing a new county hospital at Tipton and a committee was appointed to look into the matter.

Adjourned. W. F. DUNHAM, M.D., Secretary.

VIGO COUNTY

The Vigo County Medical Society met in regular session, January 20, with fifty-two members present.

Dr. Bransford Lewis of St. Louis gave an illustrated lecture on "Diagnosis and Pathology of Diseases of Genito-Urinary Tract." He showed many very interesting and actual reproductions of conditions he had found in his wide experience, which were very educational.

WAYNE COUNTY

The January meeting of the Wayne County Medical Society was held at Richmond, January 7. Roll showed fifty-five members in good standing; Dr. J. C. Clawson of Boston was elected as the fifty-sixth member.

Dr. J. M. Thurston read a paper on "Sero-Therapy Along the Lines of Therapeutical Conservation." He told of good results following his method of administration of serums (streptolytic) and phylacogens by the injection of these serums into the rectum. Better results follow this method than by any other method and there are no reactions of any nature whatsoever. In this method no previous preparation of the rectum is necessary. The doctor cited many cases showing good results.

The paper was discussed favorably by many members.

Adjournment, followed with a social hour and refreshments. A. J. WHALLON, M.D., Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1913, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

RADIUM AND RADIUM SALTS.—Radium is used in medicine in the form of its chloride, bromide, sulphate and carbonate. The therapeutic value of radium salts depends on the emanations which are given off from

the radium. Radium emanation consists of alpha-rays, beta-rays and gamma-rays, the latter being similar to x-rays and therapeutically the most useful. The quantity and concentration of radium emanations are expressed in terms of "curie" and Mache units. A "curie" is the amount of emanation in equilibrium with 1 gm. of radium and a microcurie is one millionth of a "curie." A microcurie is equivalent to about 2,500 Mache units. It has been claimed that radium emanation is of value in all forms of non-suppurative, acute, subacute and chronic arthritis, in chronic muscle and joint rheumatism, in arthritis deformans, acute and chronic gout, neuralgia, sciatica, lumbago and in tabes dorsalis for the relief of lancinating pains. Its chief value is in the relief of pain. Surgically marked results are obtained in the removal of epitheliomata, birthmarks and scars. Radium may be administered in baths, by subcutaneous injection in the neighborhood of an involved joint (0.25 to 0.5 microcurie in 1 or 2 c.c. distilled water), by local application as compresses (5-10 microcuries), by mouth as a drink cure (in increasing doses of from 1-10 to 10 microcuries three or more times a day), by inhalation, the patient for two hours daily remaining in the emanatorium, which contains 0.0025 to 0.25 (average 0.1) microcurie per liter of air.

RADIUM CHLORIDE.—Radium chloride is supplied in the form of a mixture of radium chloride and barium chloride, and is sold on the basis of its radium content. Radium Chloride-Standard Chemical Co., Radium Chemical, Pittsburgh, Pa.

RADIUM SULPHATE.—Radium sulphate is supplied in the form of a mixture of radium sulphate and barium sulphate and is sold on the basis of its radium content. Radium Sulphate-Standard Chemical Co., Radium Chemical Co., Pittsburgh, Pa. (Jour. A. M. A., Jan. 3, 1914, p. 41).

SODIUM ACID PHOSPHATE.—Sodium Acid phosphate (Sodii Phosphas Acidi), $\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$, is the monosodium dihydrogen salt of orthophosphoric acid, containing not less than 82 per cent. of anhydrous sodium acid phosphate. Sodium acid phosphate is administered to render the urine acid or to increase its acidity. It is used for this purpose to assist the action of hexamethylenamin which is effective only in acid urine. It should be given so that it has left the stomach before the hexamethylenamin is given. Non-proprietary preparations: Sodium Acid Phosphate, M. C. W., The Mallinckrodt Chemical Works, St. Louis, Mo.; Sodium Phosphate, Monobasic, P. W. R., The Powers-Weightman-Rosengarten Co., Philadelphia, Pa. (Jour. A. M. A., Jan. 10, 1914, p. 127).

SLEE'S REFINED AND CONCENTRATED TETANUS ANTITOXIN (GLOBULIN SOLUTION).—For description of Tetanus Antitoxin see N. N. R., 1913, p. 218. Abbott Alkaloidal Co., Chicago.

SLEE'S NORMAL HORSE SERUM.—For description of Normal Horse Serum see N. N. R., 1913, p. 236. Abbott Alkaloidal Co., Chicago (Jour. A. M. A., Jan. 10, 1914, p. 128).

AMPOULES EMETINE HYDROCHLORIDE, P. D. & Co.—Each ampoule contains emetine hydrochloride 0.02 gm. Parke, Davis & Co., Detroit, Mich. (Jour. A. M. A., Jan. 10, 1914, p. 128).

PHENOLSULPHONEPHTHALEIN.—A product differing chemically from phenolphthalein in that a carbonyl group of the latter has been replaced by a sulphone group. Phenolsulphonephthalein is used to determine the functional activity of the kidneys. It is injected intramuscularly or intravenously and its rate of excretion determined colorimetrically. Phenolsulphonephthalein is a red powder which yields a deep red solution with water or alcohol containing an alkali.

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NEOSALVARSAN-EHRlich, SUSPENSION IN AMPOULES.—Each contains 0.15 gm. neosalvarsan suspended in a vegetable fat. Hynson, Westcott & Co., Baltimore, Md. (Jour. A. M. A., Jan. 24, 1914, pp. 297 and 298).

ELARSON.—Elarson is the strontium salt of chlorarsenobenzoic acid, containing about 13 per cent. of arsenic and about 6 per cent. of chlorin. It has the action of arsenic, but the arsenic being in lipid-like combination is said to be better utilized and to exert its therapeutic effects in smaller doses than other organic arsenical preparations. Also, it is said to produce relatively little gastric irritation. It is sold only in the form of Elarson tablets. The Bayer Co., New York (Jour. A. M. A., Jan. 31, 1914, p. 379).

PROPAGANDA FOR REFORM

THE ACTION OF HEXAMETHYLENAMIN.—It has been shown by Hanzlik and Collins that hexamethylenamin can act only in body fluids which are acid in reaction, namely the gastric juice and the urine. The only part of the body in which hexamethylenamin may be expected to exert an antiseptic action is in the urinary tract, and then only if the urine is acid. If the urine is not acid already sodium acid phosphate should be administered to render it so. The administration of sodium or potassium acetate or citrate, in sufficient quantity, will render an acid urine alkaline and inhibit the action of hexamethylenamin (Jour. A. M. A., Jan. 3, 1914, p. 43).

ODOR-O-NO.—Odor-o-no, The Odor-o-no Company, Cincinnati, Ohio, is sold as the "anti dress-shield toilet water." It is claimed to eliminate excessive perspiration and to be absolutely harmless. Confirming the analysis made by the Indiana state chemists some time ago, the A. M. A. Chemical Laboratory reports that now, as when examined before, Odor-o-no is a strong solution of aluminum chloride. When this solution is applied to the skin, it will be decomposed by the perspiration into free hydrochloric acid which will attack and irritate the skin, and aluminum hydroxide which tends to clog up the pores (Jour. A. M. A., Jan. 3, 1914, p. 54).

HYDROCYANATE OF IRON, TILDEN.—While from the name one would judge Hydrocyanate of Iron, Tilden to be a cyanide of iron, analysis in the A. M. A. Chemical Laboratory has demonstrated the preparation to consist essentially of equal parts of talc and Prussian blue, with traces of organic matter having the properties of alkaloids. Prussian blue is a remedy that has been used for epilepsy and found wanting (Jour. A. M. A., Jan. 3, 1914, p. 58).

THE QUALITY OF SODIUM ACID PHOSPHATE.—As it appears probable that the use of sodium acid phosphate will increase and since previous experience has emphasized the unreliability of little used drugs, the A. M. A. Chemical Laboratory deemed it important to examine the market supply. While the official sodium phosphate may be obtained of exceptional purity, the examination showed that the market supply of sodium acid phosphate was decidedly variable and much less pure, although not seriously impure. Based on the exami-

nation the laboratory proposed standards which were thought fair, both to those who make it and those who use it in their practice. The examination showed the product of the Mallinckrodt Chemical Works and of the Powers-Weightman-Rosengarten Company to comply with the proposed standards. Acting on the report of the laboratory, the Council on Pharmacy and Chemistry decided to describe sodium acid phosphate in New and Nonofficial Remedies and, having adopted the proposed standards of purity, accepted the two brands named for inclusion with N. N. R. (Jour. A. M. A., Jan. 10, 1914, p. 142).

HYPO-QUINIDOL.—While no definite statements appear to be contained in the advertising matter sent out by R. W. Gardner, certain statements suggest that Hypo-Quinidol might be some sort of a quinin hypophosphite preparation. But if this is true, its action would be the same as other salts of quinin and the extravagant claims made could not be substantiated. Hypo-Quinidol is a preparation the composition of which is secret and for which highly improbable claims are made (Jour. A. M. A., Jan. 10, 1914, p. 148).

THE RICHIE MORPHIN CURE.—The Richie Company was discussed in Collier's Great American Fraud series as one of the concerns which under the guise of mail-order "cures" for the morphin habit fosters the slavery of the drug habit by substituting for the morphin addiction an addiction to their villainous mixtures of opiates. More recently shipments of the Richie "cure" were seized by the Federal authorities and found on analysis to contain from 7.21 grains to 15.95 grains of morphin sulphate to the fluidounce (Jour. A. M. A., Jan. 10, 1914, p. 144).

RADIUM IN CARCINOMA.—Sparmann reports on the after-history of fifty-three cases of carcinoma treated with radium. Of these eleven have died since the treatment, in six the tumor has disappeared, in five the condition seems improved, in seven the condition is aggravated and in the others the treatment was not continued because the condition of the patients had become worse. While these results show that radium is a remedy of use in the treatment of cancer it is not a sovereign remedy as some enthusiastic reports would have us believe (Jour. A. M. A., Jan. 17, 1914, p. 212).

EXPURGO ANTI-DIABETES.—The claim made for Expurgo Anti-Diabetes (sold in Canada as Sanol Anti-Diabetes) that it is "The only positive cure for Diabetes" and others of this character should be sufficient to condemn it. Nevertheless medical journals advertise it and physicians have been found to give testimonials for it. Examination in the A. M. A. Chemical Laboratory showed that Expurgo-Anti-Diabetes is essentially a watery solution of plant extractives with small quantities of sodium salicylate and salt. The exploiters claim that their stuff contains the fruit and bark of jambul, rosemary, star anise and fluid extract of calamus, cinchona, cola, condurango and gentian. One of the claimed ingredients, jambul, was in vogue as a remedy for diabetes some years ago. It was tried and found wanting and relegated to the therapeutic scrap heap (Jour. A. M. A., Jan. 24, 1914, p. 312).

CASE'S RHEUMATIC SPECIFIC.—This is a "patent medicine" sold under the inferential claim that it does not contain salicylate. A package bearing the statement that this medicine "Cures where all else fails rheumatism; muscular, sciatica, lumbago, gout, neuralgia, neuritis," contained one box of "Rheumatic and Gout Pills" and one of "Bilious and Liver Tablets." Examination in the A. M. A. Chemical Laboratory showed the first to contain sodium salicylate with some magnesium oxid and licorice root while the second was found to contain aloin or some preparation of aloes as the purgative constituent (Jour. A. M. A., Jan. 31, 1914, p. 394).

BOOK REVIEWS

STUDIES CONCERNING GLYCOSURIA AND DIABETES. By Frederick M. Allen, A.B., M.D. Octavo. 1,200 pages. Price, \$9.00. Publisher, Harvard University Press, Cambridge, 1913.

This book represents the research work the author has done on diabetes together with a complete review of the work done by others. The book is not a textbook on diabetes but a record of the experimental work done on animals in the attempt to clear up a few of the difficult and unsolved problems presented by glycosuria and diabetes. The results of this research have done much to put our knowledge on a firm basis, and these results have served to explain and co-relate the many apparent anachronisms that have appeared in experimental and clinical observations.

The prevalent idea that there is a limit of the ability of the animal organism to assimilate dextrose is shown to be incorrect, and it is demonstrated that every non-diabetic organism can utilize dextrose in absolutely unlimited quantity. This may be illustrated by a concrete example, a normal person was given 150 gm. of dextrose and it was found that he excreted 0.15 gm. of dextrose; now if this same individual is given 250 gm. of dextrose he excretes only 0.52 gm. of dextrose, and not the odd 100 gm. he should excrete were the so-called assimilation limit a little less than the 150 gm. This is in marked contrast to the diabetic who has a definite assimilation limit, and when this is exceeded he not only excretes all the dextrose that is given in excess of his limit, but may excrete even more.

A definite technic has been developed by which a true diabetes of any degree of severity may be produced in animals. This of itself is a long step in advance, as such animals may be utilized in testing drugs, diets and operative procedures in the cure of the disease.

A point was discovered that may be of much practical importance, namely that the ligation of the pancreatic ducts in animals with experimental diabetes markedly increased the animals' ability to use carbohydrates.

While the work is not suitable for practitioners generally, it should be in the libraries of colleges and research laboratories.

THE SURGICAL CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago. October, 1913; published bi-monthly by W. B. Saunders Company, Philadelphia and London.

The two most interesting topics of this number, perhaps, are the discussion of "Osteitis Fibrosa Cystica," so beautifully illustrated both clinically and skiagraphically, and "Congenital Idiopathic Dilatation of the Colon; Hirschsprung's Disease."

Many interesting and important facts are brought out in connection with diffuse, suppurative peritonitis originating in appendicitis, but exception should be taken to the use of the term "general" peritonitis. While the involvement may be, and often is, decidedly wide-spread, yet there are practically always some areas of the peritoneal cavity not invaded.

A feature of this number also is the "Talk on Cancer," by W. L. Rodman whose extensive work on breast carcinoma has made of him an authority.

A TEXT-BOOK OF BIOLOGY. For Students in Medical, Technical and General Courses. By William Martin Smallwood, Ph.D., (Harvard), Professor of Comparative Anatomy in the Liberal Arts College of Syracuse University, and in charge of Forest Zoology in the New York State College of Forestry at Syracuse. Octavo, 285 pages; illustrated with 243 engravings and 13 plates, in colors and monochrome. Cloth, \$2.75, net. Lea & Febiger, Publishers, Philadelphia and New York, 1913.

The modern medical curriculum presupposes a rather intimate knowledge of biology and yet most medical libraries have need for a thoroughly up-to-date text-book upon the subject, such as is Dr. Smallwood's.

The work is prefaced by a brief historical review of biological advance and the earlier chapters of the text are devoted to a consideration of the organism as a whole, the structure and functions of organs, the structure and properties of tissues, and the parts of the cell and their work; the biology of cells acts as the basis and background for the remainder of the work.

The book is well illustrated and modern literature freely drawn upon.

DORLAND'S AMERICAN ILLUSTRATED MEDICAL DICTIONARY, New (7th) edition revised and enlarged, edited by W. A. Newman Dorland, M.D. Large octavo of 1,107 pages, with 331 illustrations, 119 in colors. Flexible leather, \$4.50 net; thumb indexed, \$5.00 net. 1913. W. B. Saunders Company, Philadelphia and London.

Dorland's Medical Dictionary is justly popular with the medical profession owing to the fact that it is a volume of convenient size and it is sufficiently complete for the varied requirements of all classes of medical men. The author does not claim that he has produced an encyclopedia. What he has produced is a dictionary—a concise and convenient word-book, aiming to furnish full definitions of the terms of medicine and kindred branches, and such collateral information as medical men generally would be likely to look for. This includes the terms used in medicine, surgery, dentistry, pharmacy, chemistry, veterinary science, nursing, biology, and kindred branches. It contains a number of new and elaborate tables, including those pertaining to stains and staining methods, methods of treatment, tests, etc. This new Seventh Edition contains over 5,000 more terms than the previous edition and yet the book retains its convenient size and attractive appearance. The flexible leather binding is a distinct advantage. All in all, this dictionary is such as any physician will want to keep on his desk for constant reference.

STAMMERING AND COGNATE DEFECTS OF SPEECH. By C. S. Blumel; two volumes; each approximately 400 pages; cloth; price \$5.00 net for the two volumes. G. E. Stechert & Company, New York, London, Leipzig, Paris; 1913.

This is probably the best work of its kind published, as we know of nothing that approaches it in comprehensiveness. It is in reality a systematic analytical investigation into the cause of stammering, with the author's theory as to the cause. Volume I deals with the psychology of stammering, including the theoretical discussion of the causality. The second volume reviews and criticises the systems at present employed in treating stammering in Europe and America. After abundant analysis, the author arrives at the conclusion that the primary cause of stammering is tran-

sient auditory amnesia. The secondary, or auxiliary causes are bewilderment, perversion of the verbal imagery, auto-suggestion giving rise to inhibition of the will, and finally fear. The use of physical effort in speech might be regarded as another of the immediate causes of stammering, but the physical stammering to which it gives rise, the author considers is really an extraneous symptom. The secondary causes of stammering are considered as effects of the primary cause, and if the primary cause, auditory amnesia, can be removed, the secondary causes will quickly vanish. When elocutionary methods effect a cure, as they do in a few instances, there can be little amnesia involved. The author considers the logical method of handling the defect is by attacking the primary disturbance at its very inception—during early childhood—and not first to await the development of complications. If the amnesia is severe, the child can be converted from an audito-moteur to an articulo-moteur. If the amnesia is not severe, it can generally be counteracted. If the child is taught to suppress all excitement and to think of the words he is going to utter—to think how they are going to sound—he can usually overcome his amnesia. The author believes that it is the obvious duty of every municipality to introduce courses of study for stammering children, and he cites the experience of a few of the progressive municipalities of Europe and America where systems of instruction, even though in some instances lacking in merit, have in general shown a large percentage of cures. Many of the systems employed by "speech specialists" are entirely devoid of merit and must inevitably become obsolete with the advancement of the psychological investigation of stammering. Meanwhile, progress is hampered by charlatans who rob the stammerer and bring everybody and everything connected with the treatment or investigation of stammering into disrepute.

The author concludes his analytical review and theorization by saying that the intelligent mother can usually accomplish all that is possible for a stammering child if, instead of waiting for him to "out-grow" the difficulty, she will undertake to combat the impediment. Throughout the text the author lays down simple rules to be followed in carrying this into effect. In its entirety the work should prove interesting and valuable to those who are called upon to give advice concerning stammering children.

THE SURGICAL CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago, December, 1913. Published bi-monthly by W. B. Saunders Company, Philadelphia and London.

The chief feature of interest of this number is the first article, that of the Production of Artificial Pneumothorax by Injection of Nitrogen. Other interesting subjects treated are Bone Cyst of the Radius, Formalin and Glycerin Injection in a Tuberculous Abscess of Spinal Origin, and the talk on Cholelithiasis and Cholecystitis.

As usual, the number is well illustrated by skiagrams wherever their use is indicated.

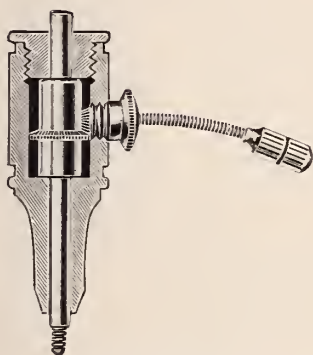
A copy of the Therapeutic Price-List (1913-1914) can be secured from the Abbott Alkaloidal Company, Chicago, on request. This book is more than the name implies, a mere price-list. It is cloth bound in attractive library style and one department alone contains over 100 pages of clinical suggestions. There are some 400 pages in all.



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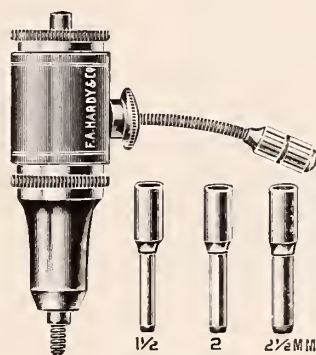
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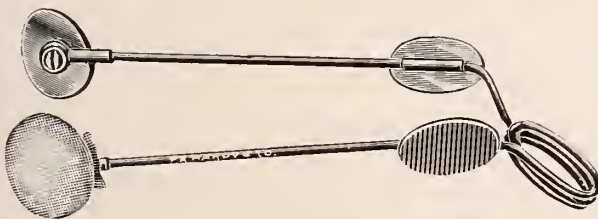
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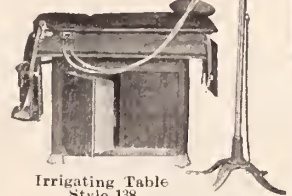
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THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, Lafayette, September 24 and 25, 1914

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THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

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ISSUED MONTHLY under Direction of the Council

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ORIGINAL ARTICLES

LABORATORY EFFICIENCY *

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Mayo Clinic

ROCHESTER, MINN.

INTRODUCTION

The idea of the technical medical laboratory is an outgrowth from two sources, first, from the older general laboratories of physics and chemistry, and second, from the general laboratory idea which developed slowly in the clinical field of medicine. The older clinician looked on his patient not so much as material on which to work as a human being with an ailment at whose nature and treatment it was his privilege to guess. Slowly there grew up, however, in the mind of the clinician the desire to find out the story which might be told by excretions or removed tissues, and these he began to examine by chemical and physical means, adopting the methods and apparatus previously devised in the chemical and physical laboratories.

The development of the laboratory for the study of the patient has, however, been very slow, and not until the importance of teaching something of science to medical students forced itself on the attention of the medical profession, were there organized any laboratories in the sense in which we now use the term. Thus, teaching laboratories were the first medical laboratories to develop and long remained the standard in this and other countries. It is only within the last ten years that a medical laboratory with functions other than teaching has begun to be recognized in the medical profession. Thus we have had in the development of the pathologic labora-

tory particularly, the somewhat anomalous condition of teaching, overshadowing, if not indeed taking the place of, all the other functions of the organization, that is, diagnosis, treatment and research.

For I take it that the pathologic laboratory has in common with clinical medicine and surgery a clearly defined duty to perform in each of these four departments, namely, diagnosis, treatment, research and teaching, and I invite your attention this evening to a consideration of efficiency in the pathologic laboratory as related to each of these four functions.

DIAGNOSIS

When a patient is examined clinically by one man, surgically by another and pathologically by a third, the real cause of his ailment may readily be inaccurately or incompletely formulated if either of the three depends solely on the data which he himself has collected for the determination of the diagnosis. On the other hand, it frequently happens that neither of the three is capable of correctly interpreting the data supplied by the other two. The pathologist has properly, always steered clear of finality in diagnosis except in infections and neoplasms. The reluctance of the pathologist to make a comprehensive diagnosis under other conditions is primarily due to his modest recognition of the fact that he is relatively without clinical experience. On the other hand, the clinician and the surgeon are both sometimes deficient in any similar modesty concerning their lack of pathologic experience. There can be no question but that all the data should be coordinated by the clinician, and there can equally be no question that the clinician should have sufficient knowledge of pathologic processes to interpret the data supplied by the pathologist.

Unfortunately, it is true that the average training of the clinician of to-day is sadly defec-

* A talk before the Indianapolis Medical Society, Nov. 25, 1913.

tive on the laboratory side. In his regular medical course he may have gotten a fair grounding in the general principles of pathology. After graduation he takes an internship in a general hospital, where, however good his supervision in clinical matters may be, the little laboratory experience he obtains is usually without proper direction or control. After serving his internship, if, by any chance his conscience pricks him concerning his deficiencies in laboratory subjects, about the best he can do is to "take a course," usually in some European laboratory, where, for a fat fee, he gets a lean portion of tough facts poured into his unprepared mind. In the end, he has at no time in his preparation for clinical work been compelled to investigate in the laboratory under proper guidance any problem relating to the diagnosis of any patient or to seriously attempt to solve any question relating to the cause of disease. As a result, when there come to him, concerning a patient, the data furnished say by a complete examination of the urine, of an examination of the blood, of an examination of the gastric contents, of an examination of the feces, of a fluoroscopic examination of the alimentary canal, and of a bit of tissue clipped from some point therein, he is wholly unable to assimilate, to coordinate and to interpret the data obtained. Too frequently he falls back on his intuitions as to what is the matter with the patient. That thing which we call intuition in the clinician is really only the result of the working of subconsciousness on the data supplied by previous experience.

So far as the diagnostic laboratory itself is concerned, one of the greatest factors which makes for its inefficiency is the presence therein of untrained men. Too frequently the surgeon and clinician, being themselves inexperienced in the difficulties of laboratory diagnosis even of infections and neoplasms, are willing to take the dictum of some last year's graduate whose opinion on a clinical or surgical problem they would not consider for a moment, forgetting that his opinion on the results of a laboratory examination is rendered by a mind equally untrained in pathology. The untrained pathologist when unguided is as dangerous to the patient as he would be were he similarly unguided in his medical or surgical care of the patient. His too frequent presence without control in the diagnostic laboratory of the hospital can be accounted for by the fact that for the sake of experience he is willing to work for a small salary. His sole control of the laboratory department of a hospital is as absurd as would be the sole care of

the patients clinically by the interns of such an institution. The remedy lies in the provision of more and better trained men and in their better remuneration by hospitals.

One of the most important factors of efficiency in the laboratory is the non-medical technician. This position has long been recognized in European laboratories, where the "Diener" is a highly trained man, frequently a retired petty officer from the army. The adaptation of the male "diener" system to the American laboratory has not usually succeeded since it is difficult to find men with sufficient education who are willing to give years to constant routine work in delicate manipulations. The solution of the problem in this country appears to be the high school or university girl-graduate. Women will do routine technical work of any sort more rapidly, more accurately and more conscientiously than will men. The labor in the laboratory is light, pleasant and much less wearing than school teaching. It should be better paid than school teaching.

One word of caution concerning women as technicians. My experience has been that it is wise to avoid the "lady doctor" and the "lady nurse." Both have the idea that they have been trained for "higher things." It is very rare indeed that one can get either who will put the same faithful service into the work that the ex-schoolteacher or high school or college girl specially trained for the work will give to it.

The necessity for technicians is frequently overlooked and the attempt is made to get the service done in hospitals by interns or medical students, first, because their labor is cheap and second, because it is supposed to be a good thing for the embryo doctor. While both of these propositions may be true, the objections to these shifting, imperfectly trained assistants are so serious that such an arrangement should not be considered for a moment if the highest efficiency is to be expected from the laboratory. The young doctor is interested mainly in the theoretical side of things and pays little attention to the routine technic even while engaged therein, while his term of service is usually so short that his skill is but very slightly developed by the time he leaves the service. Quite as well might the surgeon attempt to manage his sterilizing room and the routine details of his operating room with similar help. At the same time, the pathologist who attempts to get along without technical assistants is in exactly the same position as would be the surgeon who did his own sterilizing, preparation of instruments, etc. The proportion of technicians to scientific workers in

the pathologic laboratory should not be less than two to one.

The diagnostic laboratory should be in immediate apposition to the working place of the clinician and the surgeon for whom the data is intended. Some time may be wasted by the clinician visiting in the clinical diagnostic laboratory but he is thus kept in closer touch with the results, the methods and the ideals of the laboratory. At the same time the laboratory worker is equally benefited by close association with the clinician. Each must understand that the work of both must be closely coordinated to be of highest value to the patient and to scientific medicine. Aside from the technical coordination, goodfellowship must exist between the clinical and laboratory workers, that unpleasant misunderstandings may be avoided.

All of these propositions hold true for the laboratory of surgical diagnosis and here there is also the additional factor of the necessity of immediate returns to the surgeon of data obtained from the examination of fresh tissue while the patient is still on the operating table. Ten years ago most pathologists would have smiled in a superior manner at the proposition to make a diagnosis of neoplasms or of infectious granulomata while the surgeon waited. Within the last ten years, however, we have abundantly demonstrated that not only may such diagnoses be made within a few minutes after the receipt of the tissue in the laboratory, but that they may be correctly made, and further that in some instances data unobtainable in fixed tissues may be found in the freshly stained tissue.

The diagnostic laboratory in close relationship to the operating room is as important as is the sterilizing room. No hospital should be permitted to run an operating room in which patients with tumors of doubtful malignancy are operated on unless it at the same time maintains a diagnostic laboratory and a competent pathologist.

TREATMENT

The treatment of patients by the laboratory should be confined to those diseases in which the administration of the curative agent is a minor surgical procedure, while the immediate preparation of material to be injected is a major laboratory procedure. The very generally satisfactory administration of the Pasteur treatment for rabies by laboratory workers in Pasteur institutes all over the world for many years is the best argument for the safety and efficiency of the laboratory treatment of patients. I am inclined to think that all autogenous vaccines should be

similarly administered. When we compare the great number of blunders that have been made by clinicians in the administration of such a simple and fool-proof preparation as diphtheria antitoxin with the rare errors that have been made by laboratory workers in the administration of the exceedingly complicated treatment for rabies, there can be no question but that it is safer to trust the patient to the man who is accustomed to handling inoculation materials than it is to trust him to a man who is not so accustomed. On the other hand, I doubt whether the laboratory should be burdened by the administration of drugs of non-biologic origin, such as salvarsan. The mere fact that the Wassermann reaction is made in the laboratory is no excuse for the administration of a purely drug remedy for the disease which the laboratory man may have been called on to help diagnose. But there is every reason for the establishment and maintenance, in connection with every large hospital clinic, of a laboratory for the administration of vaccine treatment for rabies, typhoid fever, acute and chronic infections, etc.

TEACHING

The pathologic laboratory devoted to the teaching of undergraduate medical students has been the best developed, best organized and most efficient of all types both in this country and abroad. If I were to offer any criticism on the teaching laboratory in the high class medical schools of this country to-day, I should say that they fail to give sufficiently intimate knowledge of the few important things by attempting to give a general knowledge of the many unusual and unimportant things. The course in pathology is apt to be spread out so thin over the field thus broadened that no more specific knowledge of any one topic is obtained by the medical student than he might obtain with much less effort by reading alone.

The pathologist who has a thorough working knowledge of two or three topics is far better equipped to work out for himself alone a similar useful knowledge of other topics than is the one who has only a general knowledge of a great many things. If one were revising the courses in pathology given in medical schools to-day, the ideal thing would be to confine the instruction in general pathology, principally to inflammations and neoplasms and in special pathology, principally to perhaps half a dozen special topics.

While undergraduate teaching in the laboratories in America has been carried to a fair stage of perfection, the teaching of the graduate

student has been sadly neglected. No adequate opportunity has been provided for the practicing clinician or surgeon to supplement his inadequate training in pathology. The great state medical schools, at least, must come to realize their duty to provide for the physicians of the State opportunity for graduate instruction in laboratory subjects as well as in medicine and surgery. Ideally the instruction should be coordinated in the three great divisions of medicine. For some little time at Rochester we have been offering to a limited number of men an opportunity to get instruction in surgical pathology, in clinical diagnosis and in surgical procedure by taking on, for a period of three years, properly prepared men on a fellowship basis. These men spend one year in the laboratory, one year in clinical diagnosis and one year in surgery. While the instruction is incidental, the opportunity for the conscientious doctor to get a fair working knowledge of the principles of each of the subjects is very good.

RESEARCH

The research laboratory should never be wholly dissociated from the clinical side of medicine any more than is the diagnosis laboratory, and provision for research work should be made in the organization of every pathologic laboratory. The pathologist, even though he be relieved from the drudgery of technic by skilled technicians, will not remain long satisfied in any institution where his duties are confined to diagnosis. If he does so remain, his value to the diagnostic laboratory will rapidly deteriorate because of his lack of growth.

So far as may be, the research phase of the laboratory should be based on the material furnished by routine work. In this manner, it is not only less esoteric but it also proceeds with less friction than when it is entirely dissociated from the routine material. Speaking generally, I should say that every scientific laboratory worker should see to it that no more than half his time at most should be occupied by routine work, the remainder to be taken up by research. By this I do not mean that the day should be equally divided into so many hours for this and so many hours for that, because the research worker who works by the hour is apt to produce very commonplace results. It is only when a man is willing to work twenty-five hours out of the twenty-four when occasion demands it that he turns out the highest quality of research work. But when such a man has spent his nights in this manner he should not be expected to spend

all of his days in teaching or in other routine work. When he has completed an investigation or when he finds that he has gone so far that he is completely fagged out, there should be provision for his "going fishing" without the routine work suffering.

One unfortunate phase of the development of large laboratories, particularly in teaching institutions, is the enormous overgrowth of executive duties. Where these are thrown wholly on the head of the department his time is so frequently occupied thereby that he has little opportunity for research, though he may be best equipped for this work. The delegation of these executive duties to a purchasing agent, to the heads of laboratory divisions, or even to the janitor, is to be recommended rather than that a high class research man heading a laboratory department shall be made a hack horse for the management of what is really the laboratory housekeeping.

BLOOD-PRESSURE AND SIGNIFICANCE IN HYPERTENSION CASES

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TERRE HAUTE

The study of human blood-pressure by direct means is not applicable as a clinical method for ethical and other reasons. Its use, however, gives real values to the results obtained by the indirect method. For the latter method, many devices have been invented, which, by their simplicity of application, have led to a wide study of blood-pressure, a very considerable literature on the subject and valuable deductions. The inventions now commonly in use consist of a pneumatic arm band continuously connected by rubber tubing to an air-inflating bulb and a mercury column or aneroid, graduated to measure in mm. of mercury the air-pressure required to obliterate the radial pulse. I used Cook's modification of Riva-Rocci's sphygmomanometer from 1904 to 1909, soon discarding the original moderately wide cuff because of its too high readings for wider ones of various styles. The size of the instrument, amount of rubber tubing and accidental spilling of the mercury were the least of its objections. Much difficulty was experienced in reading the oscillations of the mercury for diastolic pressure, and it was noticed that frequent sudden drops of the column occurred out of proportion to the gradual and even escape

of the air-pressure. The oxidized mercury adhering to areas inside the capillary tube prevented the free movement of the mercury column. In 1909 I discontinued the use of the mercury manometer for clinical use and employed it chiefly to correct, at intervals, the readings of the aneroid instrument which I now use.

This latter instrument, with a 5-inch arm band, is operated by an aneroid drum instead of the less reliable spring. It is more compact and portable and is quickly applied on a patient anywhere in any position. The readings vary from 2 to 3 mm. at various but constant points when compared with the more accurate mercury column. However, after such comparisons, which should be frequent, it is easy to bear in mind the points of variation and the degree. I would call attention of those who make life-insurance examinations that the point at which the aneroid registers 150 mm. by the mercury column should be determined accurately, for above that point many companies reject an applicant who shows no other impairment. Arterial blood-pressure is dependent on:

1. The propulsive power of the heart, varying chiefly as the volume output of the ventricles.

2. Peripheral resistance, which varies with the vasoconstrictor or dilator action on vessels. When this action is exerted on the abdominal vessels innervated by the splanchnic nerves, it has a greater effect on general blood-pressure than the action of any other part of the vascular system.

3. Elasticity of the walls of the vessels, the variations depending on their distensibility.

4. Quantity of the circulating medium, which, contrary to expectation, is the least important in the control of blood-pressure. Tappeiner found that one-fifth of the total blood-volume could be lost and in a short time the pressure would again reach a height to support life. Worm-Muller transfused an amount of fluid greater than the total blood-volume of the body without increasing the blood-pressure beyond a point it frequently reaches under ordinary conditions.

Blood-pressure in different individuals will vary with the age, sex, occupation, size and temperament. Blood-pressure in the same individual will have its periodic and diurnal variations, and is influenced by posture, sleep, meals, alcohol, tobacco, psychic states, muscular exertion, temperature, baths, atmospheric pressure and menstruation. To these may be added climate, from Merchant's statement at the Chicago meeting of

referees, that in the Southern states the average pressure is about 10 mm. higher than in the Northern states. No adequate reason has been advanced for this occurrence. I hesitate to make the suggestion of its being due to the American tendency of surcharging the system with superabundance of nitrogenous food and the lack of oxidation of these products by the sedentary life followed by the resident of the South. In the muscular individual the pressure reads higher, and I believe is due to more or less cardiac hypertrophy. However, it might be supposed that the larger amount of soft tissues included in the arm band would increase clinical blood-pressure readings. That it does not has been clearly demonstrated by Von Recklinghausen, especially where a 5-inch arm band is used. Janeway's results were the same. In the latter's cases the pressure was taken on the fully developed and atrophied arms of the same individuals. I have several times observed a decided difference in the readings taken from both arms of the same individual at the same time. In these cases it was clearly evident that it was due to the extreme difference in the anomalous size of the arteries. Considering the effect of pathologic states of the arteries, Janeway and Park, in their experiments on animals and post-mortem specimens, concluded that atheroma of considerable degree was without appreciable effect on compressibility, and that calcification of the arterial wall did not produce an overpressure to exceed 17 mm. In my own experience, I have had under observation, for five years, a case in which the radial pulse is not obliterated under a pressure of 300 mm., due I believe to the almost complete calcification of his upper extremity arteries. I believe his arteries would as soon collapse under pressure, as a bamboo pipe-stem would, embedded in the soft tissues.

The methods commonly in vogue for reading blood-pressure are by palpation and auscultation. In the former, the radial is palpated and pressure increased in the arm band until the pulse is obliterated. Then the pressure is gradually released and the point noted on the manometer at which the radial pulse first reappears, which is the systolic or maximum pressure. The air continues gradually to escape and the greatest oscillation of the mercury column or fling of the hand of the aneroid is accepted as the diastolic or minimum pressure. The reading is taken at the lowest figure touched in the maximum oscillation. The difference between the systolic and diastolic is the pulse-pressure and is called by Stone "cardiac load."

The auscultatory method of determining blood-pressure was described by Kurotkon in 1905. It differed from the palpation method only in applying a stethoscope without pressure over the artery below the cuff instead of the finger over the radial. This method gives a closer reading, 2 to 5 mm. higher than the palpation method, as shown by the observations of Stone. As the air is gradually released from the cuff, a remarkable cycle is made manifest, which Goodman and Howell in 1910 divided into five phases. These are best demonstrated with a pressure, systolic 130 mm. and diastolic 85 mm. First is heard a loud clear-cut tone. The systolic pressure is read at its first appearance. The tone is due to the sudden distention of the vessel wall by the in-rush of blood during the fall of the mercury column from 130 mm. to 14 mm. below. Second, a series of murmurs is heard during a drop of 20 mm., due to whirlpool eddies produced at the point of constriction of the lumen by the cuff. Third, these murmurs suddenly disappear and a tone resembling the first is heard, lasting for 5 mm. Fourth, this is followed by a dulling of the sound for 6 mm., a transitional phase. Fifth, is the point at which all sounds disappear, and is considered by them as the diastolic pressure. They also hold that the absence of the fifth is pathognomonic of aortic insufficiency. Failure or weakness of the third sound indicates heart weakness. More recent investigators, however, conclude that the diastolic pressure should be read where the clear, sharp third tone becomes dulled; also, that as diastolic pressure is less influenced by physiologic factors and measures the peripheral resistance, it is a better index of hypertension. The auscultatory method, by lessening the personal equation and being more accurate as well as revealing more information regarding the arteries and heart, is generally conceded to be the better and more practical.

Average normal blood-pressures are difficult to determine on, especially since most of the observations are based on the palpation method and the use of various size arm bands. The average normal systolic pressure of 135 mm. for men and 125 mm. for women, as given in 1903, is no longer tenable, since they were based on the use of the narrow arm band. It has been shown that the narrow arm band gives on an average a reading 15 mm. higher than the broad band. I believe the average pressure should be that taken from normal men in all walks of life. This has been obtained in regard to systolic pressure by J. W. Fisher, medical director of the Northwestern Mutual Life Insurance Co., and given in his

Tables 1 and 2 of accepted risks. We may presume these individuals to have been without impairment, otherwise they would not have been accepted. I quote a summary of these tables as follows:

| Ages | Number | Avg. Systolic B.-P. |
|----------|--------|---------------------|
| 15 to 40 | 420 | 125.20 |
| 40 to 45 | 5,424 | 128.26 |
| 45 to 50 | 3,867 | 130.51 |
| 50 to 55 | 3,169 | 131.98 |
| 55 to 61 | 1,187 | 134.46 |

Faught gives a rule which approximates Fisher's average and is more practical. At the age of 20, consider the average normal systolic blood-pressure to be 120 mm. Hg. For each year of age above this, add $\frac{1}{2}$ of 1 mm. pressure. The systolic pressure in women is about 5 to 10 mm. lower than in men. Gibson gives the normal variations in young adults from 90 to 130 mm. In my work with older adults I believe 100 to 150 to be normal variations. Diastolic blood-pressure unfortunately has not been so widely studied as the systolic, because of the greater difficulty of making a reading with the palpation method. The easier auscultatory method has only recently come into vogue. The normal average of diastolic pressure by palpation is given as 80 mm. Gibson considers the normal variations to be 70 to 100 mm. The pulse-pressure or heart load in normal readings has been found in a series of over 5,000 observations to be 26 to 36 mm. by Cowing.

At what point a systolic blood-pressure should be considered hypertension and of pathologic significance, is as yet undetermined. Fisher in his blood-pressure mortality statistics concluded that in applicants of all ages with a systolic pressure of 150 mm. and over, the mortality was from 9.30 per cent. to 276.46 per cent. in excess of the estimated general average mortality of the company during the same period of time. Standing out prominently as the cause of death in Fisher's Table XI, are apoplexy, nephritis and arteriosclerosis. I should be inclined to the view that systolic pressure over 150 mm. is significant of a toxemia, which, if persistent over a sufficient period of time, will be productive of cardiovascular renal changes. In regard to diastolic pressure, Stone is of the opinion that a sustained pressure of 100 to 110 signifies hypertension.

The amount of indican in the urine has long been accepted as an index to the degree of absorption of intestinal putrefactions, and Bishop found increased pressure in indicanuria. Hiatt gives the operation of this toxemia as follows: All products of the intestinal canal except fat pass through the portal system, and intestinal toxins stimulate vasoconstriction through stimu-

lation of the ganglionic endings of the splanchnic nerves in the vessel walls. This action on the splanchnic vessels sets into operation the greatest of all mechanical regulators of the systemic blood-pressure. The splanchnic nerves, through the sympathetic nervous system, accelerate the heart beat, which, within limits, augments blood-pressure. The continued irritation of these toxins as well as others, finally produces sclerotic changes in the cardiovascular-renal system, with a consequence of hypertension until decompensation of the heart occurs. When the hypertension is persistent after elimination of toxins, it may be accepted as the earliest clinical manifestation of the pathologic change of the system just mentioned. The patient with non-palpable radials and hypertension may have splanchnic sclerosis, and especially is this true of the obese individual with an abdominal measurement equal to or greater than the expanded chest. J. Fisher's observation in regard to renal involvement has been substantiated by Miller and others, and I can do no better than abstract here his report. This was of "550 cases of hypertension in which the clinical and pathologic evidence of nephritis has been carefully considered. Sixty-two per cent. of these patients gave definite evidence of nephritis, 15 per cent. were suspicious, and only 23 per cent. had a normal urine. Excluding those cases with pressure below 160, in only 3.6 per cent. was the urine normal. Necropsies were held in forty-two cases, and in each instance definite microscopic evidence of nephritis was detected, although in fourteen of these the urine did not show evidence of renal trouble. This furnishes very good evidence that nephritis cannot be excluded when the urine is apparently normal." Blood-pressure is invaluable in differentiating apoplexy from thrombosis of the cerebral vessels. In the latter condition the drop may be from 200 to 100 mm.

In prognosis the functioning power of the kidney can be determined by the phenolsulphone-phthalein test, an output within the first two hours of less than 25 per cent. phthalein furnishing evidence of grave involvement. This test may be used as a guide to the likelihood of uremia, but as to the occurrence of decompensation of the heart or apoplexy, prognostication can be made only in a general way. Babcock tests the power of the myocardium by taking the systolic pressure and pulse-rate at rest; then again after exercise, when both are raised. Observation of the systolic pressure is then made when the pulse-rate returns to the previous point found at rest. If the systolic pressure drops below the pressure

found prior to exercise, it is indicative of myocardial change. No method has yet been found to ascertain the strength of the arteries. Miller is of the opinion that a pressure of 170 mm. is, as a rule, without danger, while the patient with a pressure of 200 mm. or more, even with the greatest care, is liable at any moment to cerebral hemorrhage or gradual decompensation of the heart. I believe hypertension is to a certain extent compensatory in diseases of the cardiovascular system and should be combated mainly by diet, regulation of exercise, elimination, and general hygiene. However, it becomes necessary at times to use the nitrites or iodids to control the symptoms of angina, vertigo and headache.

SUMMARY

1. The aneroid is more practical than the mercury manometer for routine work.
2. The auscultatory method of reading pressure is the more exact.
3. The diastolic pressure is the better guide to peripheral resistance.
4. Faught's rule is a practical index of average normal systolic pressure.
5. Systolic blood-pressure over 150 mm. is a hypertension.
6. Continued hypertension is significant of organic changes in the cardiovascular-renal system.
7. Blood-pressure is a valuable method of prognosis.
8. Hypertension to a certain extent is a compensatory measure.

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SURGICAL TREATMENT FOR INTRACRANIAL PRESSURE *

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Mr. President. Members of the Tenth District Medical Society:

The subject, as announced, is a vast one and it will be impossible to consider but a few phases of it to-night.

For convenience, we will divide intracranial pressure into two classes, acute and chronic.

By the acute form we mean those cases that have a definite and sudden onset, and the condition has lasted for six weeks or less. Under the chronic cases we will include the patients that have a gradual onset, also the cases that have had an acute onset and have suffered for six weeks or more.

The most common of the acute forms are intracranial hemorrhage, depressed fractures of the skull, abscess, edema and embolism. Under the chronic, the most common are tumors, cysts, chronic abscess, exostosis and thrombosis.

The general symptoms of the acute and the chronic differ but little.

Intracranial hemorrhage is perhaps the most common cause of intracranial pressure, as the symptoms are acute, constant and differ but little from the general symptoms of intracranial pressure, it will suffice here to consider the symptoms as a whole.

The hemorrhage may be supradural, subdural, intracerebral or intraventricular.

The latter form produces death almost instantly from pressure, due to the large quantity of free blood into the ventricles, and for that reason cannot be considered from a surgical standpoint. Supradural, subdural and intracerebral hemorrhage, on the other hand, produce death slowly, the patient may live for days and even weeks and die from recurrent hemorrhage, as it is not the loss of blood that produces death, but intracranial pressure.

The patients may be rendered unconscious at once and remain so until death, or they may gradually regain consciousness, improve and partially or completely recover, or they may again slowly lose consciousness, which means an

increased pressure. All such cases should be decompressed.

In the severe cases there is unconsciousness associated with paralysis of the side of the body opposite the hemorrhage. The respirations are slow (10-12) deep, sighing and irregular, the cheeks fall in and puff out during inspiration and expiration. There is a long respiratory pause following an exceedingly deep inspiration and expiration. The pulse is slow, bounding, irregular and the blood-pressure raised. Cerebral vomiting unless profound coma.

Pupils are not a position sign, but the pupil on the side of the lesion may be widely dilated, with loss of light reflex.

The *Bulletin* of the Board of Health of Illinois for the year 1910 reports 2,434 deaths from cerebral hemorrhage. It is not stated how long these patients lived after the first symptoms of the hemorrhage, many of them, no doubt, for many days and weeks. How many of these lives could have been saved by timely surgical interference only time and experience can tell.

The ages were as follows:

| | | | |
|-----------------------|-----|------------------------|-------|
| Under 1 year . . . | 36 | 50-59 years | 390 |
| 1-4 years | 11 | 60-69 years | 625 |
| 5-9 years | 5 | 70-79 years | 706 |
| 10-14 years | 1 | 80-89 years | 334 |
| 15-19 years | 4 | Over 90 | 26 |
| 20-29 years | 38 | No age given | 4 |
| 30-39 years | 54 | Males | 1,314 |
| 40-49 years | 200 | Females | 1,120 |

Of the patients that have come to me suffering with intracranial hemorrhage and have been operated on within the first twenty-four hours after the onset of the hemorrhage, not one has died from the operation, no matter what the cause of the hemorrhage. I am firmly of the opinion that every patient that has a sudden stroke of paralysis or an injury (irrespective of the cause) of sufficient severity to render him unconscious for six hours (the time limit for simple concussion) should be operated on as soon thereafter as possible (six hours), and sooner if the symptoms are severe and death seems imminent and competent surgical skill can be procured.

The old-time remedy, potassium iodid and mercury, is a delusion and a snare in most of these cases. The sequela of a blood-clot may be resolution, organization, calcification, cystic formation or infection; the infection may not manifest itself for weeks, months or even years after hemorrhage.

Although many cases of acute intracranial pressure are neglected and die unnecessarily for lack of relief of the pressure, it is the chronic

* Read before the Tenth District (Indiana) Medical Society.

cases that are often so sadly neglected and unscientifically treated:

1. From the lack of proper diagnosis.
2. From the unwise and prolonged administration of potassium iodid and mercury.

The symptoms are constant.

1. There is diffuse headache which later becomes more or less localized at times.
2. There is always cerebral vomiting, that is projectile, irrespective of the injection of food.
3. Pulse slow and irregular.
4. Respirations slow, deep, sighing and irregular.
5. Always impairment of vision.
6. Temperature normal or subnormal.
7. Babinski present on one or both sides.
8. Frequently a general hyperesthesia.
9. A constant and characteristic symptom is attacks of severe headaches followed by unconsciousness which may last from a few minutes to several days.

As the patient regains consciousness, cerebral vomiting is severe. There is severe localized headache. The headache improves, the vomiting is arrested and the patient is again able to be up and about, only again to be seized suddenly by another attack similar to the previous one described. This one is, however, a little more severe.

These attacks continue from time to time at shorter intervals until the patient succumbs during one of the attacks.

I have not seen a patient with brain tumor, cyst or chronic abscess that did not give, sooner or later, a history of seizures as described above. If the lesion is located within or encroaches on an area which controls motion, sensation or a special sense, focal symptoms will be present. If the lesion is located in a silent area, there will be no focal symptoms. After reviewing my cases, I arrive at the following conclusions:

1. The administration of the old-time remedies, potassium iodid and mercury, as a routine in all cases of intracranial pressure, irrespective of the cause, is unwise, unscientific and uncalled for. It is the exception and not the rule that benefit is derived.

If these drugs have been given properly until their physiologic effects have been secured and marked benefit is not obtained within three weeks, and there is the association symptoms of intracranial pressure, the patient is not receiving, nor does he receive all that science has to offer for his

relief and cure, if what surgery has to offer at this time (the end of three weeks' administration of potassium iodid and mercury) be not clearly placed before him.

Many of these cases with a true luetic history that resist the therapeutic value of antisypilitic remedies yield readily to them after decompression and a free and full circulation of the blood is secured, and maintained, which was impossible to obtain before on account of intracranial pressure.

2. The untimely death of many patients with intracranial pressure in both the young and old is due to the delay in operation interference.

3. The patient past the middle age of life with intracranial pressure should receive relief by surgery, if operative interference would be justified for relief in other important organs.

4. The mortality is no higher after operative interference for intracranial pressure than operative interference on cases of equal gravity with disease of other important structures.

5. The high mortality following operations on the brain is due to unwise and unscientific treatment until other organs are diseased sufficiently to cause death.

6. Cerebral syphilis with intracranial pressure yields much more readily to the intravenous administration of salvarsan after decompression.

7. There is no danger of cerebral hernia without an increased intracranial pressure.

8. If a cerebral hernia follows decompression it should not be molested, as it is the safety-valve to health.

9. All cases except emergency should have the benefit of complete laboratory work before operation. In emergency cases the work should be done after the operation. This includes:

1. Complete blood-work.
2. Coagulation test.
3. Blood-pressure.
4. Wassermann.
5. Tuberculin test.
6. Complete qualitative and quantitative urinalysis.
7. Complete eye examination by an expert.
8. The characteristic respiratory and pulse wave should be elicited by tracings.
9. Roentgen-ray in every case.

10. Intracranial pressure must be relieved if impairment of vision or blindness is to be prevented.

11. In intracranial hemorrhage it is pressure that kills and not the loss of blood.

12. In all cases of intracranial pressure suffering will be relieved and life prolonged by timely decompression.

13. There is more than concussion in all cases suffering from head injuries that remain unconscious for more than six hours.

14. Head injury, unconsciousness, return of consciousness, a gradual loss of consciousness following in a few hours or days means a hemorrhage or infection and all such cases should be decompressed.

15. The operation is not worthy the name decompression unless the dura is opened.

16. When the general practitioner and the specialist become coworkers with the laboratory expert there will be no excuse for a mistaken diagnosis in these cases.

AN INEXPENSIVE AND SIMPLE ETHER VAPORIZER

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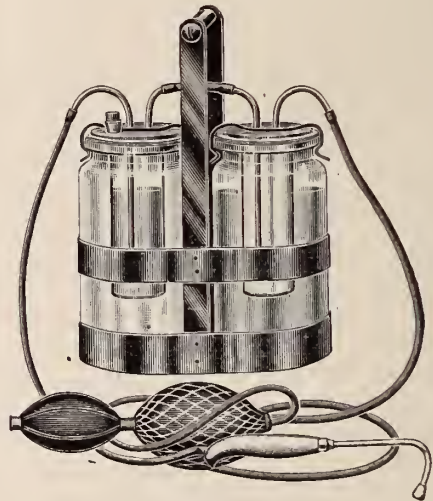
The moderate priced ether vaporizers on the market have several objections. In one vaporizer, as used by some anesthetists, the ether vapor is passed into a bottle containing hot water, and as a result the patient gets a moist ether vapor; this same one, on account of the metal tubing being small and the rapid cooling of the water when in use for any length of time, is apt to freeze, causing considerable delay. In another vaporizer no attempt has been made to pass the vapor through a second bottle, simply going direct from generator to patient. Should this generator become tilted too far the ether, by pressure and gravity, would pass into the conducting tube. Several times I have seen the liquid ether squirt into the mouth through such tilting. I have endeavored in this present apparatus to eliminate these objections; however, it has been reported to me that this apparatus froze once, personally I have never had the least trouble with it in that way.

The two one-quart Economy fruit jars are used for uniformity. To the lid of each fruit jar is soldered the lid of a 5-ounce small jar. Each small jar has two $\frac{1}{4}$ inch brass tubes, an inlet and an outlet. Anesthetize the patient in usual manner, while doing so have small jar. No. 1, filled with not over 4 ounces of ether and

corked tightly. When ready for the ether vapor, fill Economy jar No. 2 slightly over three-quarter full of boiling hot water (temperate jar first to avoid breakage). Tighten spring clamps and connect jars No. 1 and No. 2 with rubber connection. Attach tubing to mouth-gag, mouth-piece or mask to jar No. 2. The forced air passes through the ether, the resulting vapor passes into the jar surrounded by hot water then out to the patient. For short operations on the head it is not necessary to change the water; for surgical procedures, taking some time, the whole apparatus should be placed in hot water and this changed as required.

The advantages of this apparatus are:

1. If properly used, absolutely no possibility of freezing.
2. A clean, moisture free ether vapor.



3. The anesthetist can always see the amount of ether in jar No. 1, and same may be easily and quickly refilled.

4. No danger of tilting as happens with a single generator.

5. Should any of the jars get broken, they may be easily replaced.

In order to obtain the desired results from ether vapor, it is necessary to watch a few details. The metal tubing on the mouth-gag, mouth-piece or mask must be of sufficient caliber to permit a ready flow. This tubing should be inspected and tried out previous to each operation. The anesthetist must not try to give the vapor at inspiration only, a continuous flow should be given. In tonsil and adenoid work about one-half of the vapor is lost, being blown away by expiration, consequently, considerable ether is used in order to hold deep anesthesia.

SOME MINOR POINTS IN MOUNTING
EYE SPECIMENSWALTER NEVIN SHARP, M.D.
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In the first place, it is not necessary to make more stock solution than one needs to use at the time, as it is much fresher and clearer, and holds its solidity better when cool, than if frequently heated. I usually make enough for about five specimens, as follows:

Gold Label Gelatin, 10 Grams.
Water, 62 c.c.

Cut the gelatin into small pieces and heat in a small mortar over a Bunsen flame, constantly stirring the solution. After the gelatin is thoroughly dissolved, add a small portion of the white of an egg, and heat again, to clarify. Filter the solution through wetted filter-paper, and to the filtrate add an equal volume of pure glycerin. Agitate the fluid with a glass rod and add 2.50 c.c. of a 10 per cent. solution of carbolic acid.

The half section of the eye is taken from the 1:2 glycerin solution with a spoon so that the tissues may be supported in their normal relation; the section is held in the fingers and the mounting-cup inverted, and the cut section of the eye is placed against the bottom of the cup. No pressure whatever should be made on the specimen. The glycerin is now poured in gently, so that one side of the specimen is raised by it, and the air is allowed to escape. The cup is first filled to about two-thirds its volume, and gentle pressure with the glass stirring rod is made on the convex surface of the specimen to cause it to adhere to the bottom of the cup. If the specimen tends to float, it indicates that air is within the specimen. If this does not escape by gently tilting the eye upward, invert the specimen with a small platinum needle, and if any air bubbles can be seen, heat the needle to white heat and gently touch them, when they will either become dislodged or explode. The specimen is now turned to its proper position, under the fluid, and again gentle pressure is made, when the eye will stick to the bottom by the adhesiveness of the fluid and by gravitation.

The cup is now filled with the fluid and all the remaining bubbles exploded with the heated platinum needle. If you wish to place on the cover immediately, don't fill the cup to its capacity, as you will have the fluid drawn to the cover-glass and the edges of the cup by capillary attraction. Keep the edges of the cup perfectly clean

and free from the fluid. Neatness and nicety of manipulation enhances more perfect success.

Cementing the cover-glass so as to make a permanent adhesion was a bugbear to me for several years. I used Canada Balsam, Xylol Balsam and LaPage's Glue without success; but now I use silicate of soda (liquid glass), and I have no trouble in having them stick. These should not be cemented until the glycerin-jelly is hard and free from too much moisture, or condensation of the moisture will take place and drops will be formed on the inside of the cover-glass, which will be drawn to the edge by capillary attraction, and will interfere with the perfect adhesion of the cover. I allow the loose cover to rest over the specimen to prevent any dust falling on it.

It is probably not necessary to go into the previous preparation of the specimen, as it is known to every lover of the art, and we all have our pet methods. However, if I wish to use one-half of the eyeball for mounting and the other half for microscopic use, I place the globe, after freeing it from blood and extraneous matter, in a 10 per cent. solution of formaldehyd for twenty-four to forty-eight hours, wash it in water and then place in alcohol of 33, 40, 50, 60, 70 and 80 percentages for twenty-four hours each, except the last, in which it may remain for several days. Then immerse the globe in water to eliminate the alcohol or until it sinks to the bottom. Dry the globe and wrap it in paraffin paper or rubber tissue and place it in the center of a mass of ice and salt, the same as for freezing ice-cream. I use an ordinary coffee can with a perforated bottom to allow the escape of the water. Two eyes may be frozen in this at the same time; but if more eyes are to be frozen a larger receptacle should be used. It takes from one to two hours to freeze an ordinary eye. Possibly one hour is sufficient in the majority of cases, providing the water is allowed to escape freely. The best way is to set the can on something so that the water that does escape will not come in contact with the bottom of the can. After filling the can with ice and salt, cover it with several layers of heavy cloth.

After freezing the eyes, dump out the ice so that no unnecessary pressure will be made on the eyes in removing them. Have everything in readiness to make the sections. A well-sharpened thin-bladed case-knife is best, but I have used an old plano-concave razor with good success, simply from the fact I had it on hand and it was very sharp and firm.

Learn the position of the eye, either from a tab or a small stitch of black thread. Place the eye on a cork — which must be much larger than

the eyeball—and make the section in the desired direction, beginning with the heel of the knife and drawing it toward you, avoiding the sawing motion.

The section to be used for microscopic purposes is now placed in the 80 per cent. alcohol, and the section for mounting in glycerin one part and water three parts for twenty-four hours, when it is placed in glycerin and water one to two parts for twenty-four hours longer. It is then ready for mounting.

By this method the specimens look beautifully clear and the pathologic portions can be seen perfectly. I have some specimens I mounted eight years ago by this method, which are as clear to-day as the day they were mounted; there is little or no shrinking of the glycerin-jelly and the covers stick well to the cups.

With a little patience and practice any physician can mount his specimens, which will add much to his interest in the case, and they will be invaluable in the report of a case, illustrating the same.

A SIMPLE METHOD OF OPERATING IN CICATRICES OF THE ORBIT

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Within the last few months it has been my fortune to have been called on to operate several times for somewhat slight cicatricial contraction of the orbit following enucleation of the eye. In each of these cases, either from the pressure of an ill-fitting artificial eye or, as in one case, the removal of a wedge-shaped piece of the lower lid, bands of cicatricial tissue formed in the orbital floor to such an extent that no artificial eye could be kept in position. The little operation to be described and which was always performed in the office, has almost uniformly been successful in establishing a suitable groove. The parts, after cocainization, are placed on the stretch by traction on the lower lid while the patient looks strongly upward. With scissors a small opening is made in the conjunctiva about 10 millimeters posterior to the edge of the lower lid and at about its middle. With the scissors and cataract knife the conjunctiva is thoroughly separated from the underlying tissues without enlarging the opening. Now the edge of the knife is turned directly downward and all cicatricial bands completely divided along the orbital floor parallel to the edge of the lid so that they

gape widely when the lid is put on a stretch. A suture with two needles, one on each end, is employed. One needle is entered through the conjunctiva at a point over this gap and near the internal canthus and caused to emerge on the skin of the face about a centimeter from the palpebral edge. The other is passed in a similar manner near the external canthus. A loop is thus formed which by traction on the ends of the ligature pulls the loosened conjunctiva into the bottom of the cleft in the cicatricial tissue, making in fact a sliding graft. The ends of the suture are tied over a roll of gauze. This little operation being painless and bloodless may be performed in a very short time in the office and would seem worth a trial in selected cases.

It is rather humiliating to some of us to know that the lay press is doing more than the medical press in cleaning up their advertising pages of medical fakes. All over the country there is a very lively campaign waged in the interest of decency in advertising, and, beginning with the magazines and later with the newspapers, the advertisements of doctors and patent medicines are being refused space on the ground that they are misrepresentations or frauds. Every doctor who subscribes for, writes for, or even receives a medical journal that carries fake or objectionable advertising is giving his support to a species of imposition and dishonesty which very justly entitles the public to look on us with suspicion when we point to the harm done by quack doctor and patent medicine advertising in the daily newspapers. There is an old saying that "those who live in glass houses should not throw stones," and it certainly holds true here, for we have no right to ask the lay press to clean up their advertising pages when many of our medical journals are just as bad as the newspapers. What we need is a general house-cleaning. *The Journal of the A. M. A.* started the work years ago by excluding all objectionable advertising, and gradually all of the state journals are falling in line, there being twenty-two at the present time that have joined forces in an effort to have clean advertising pages. A few of the independent journals are also cleaning up, but for the most part the independent journals are willing to accept in their advertising pages almost any advertisement that offers financial gain. This practice on the part of the venal independent medical journal managers can be suppressed if the rank and file of the medical profession will positively refuse to support in any way the journals that are not free from advertising that represents fraud.

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EDITORIALS

LAY OPINIONS OF MEDICAL ETHICS

From time immemorial the medical profession has been subjected to more or less newspaper ridicule in regard to the standard of ethics under which it has been governed. To such opinions doctors have become more or less accustomed and hardened, knowing as they do that with but few exceptions newspapers are willing to attack most anybody at any time and to any degree, so long as they do not become financially jeopardized. Unfortunately, this branch of the public press of our country has, generally speaking, become so commercialized that their chief aim seems to be first to get the money, and second to cater to a gossip-loving public.

Fortunately, however, the better class of magazines has not been wont to lend itself to this type of sensational, truthless literature. So that it becomes somewhat surprising that as well balanced and stable a publication as McClure's magazine should lend space to quite so severe an arraignment as appears in its January issue under the heading of "The New Medical Ethics," written by Burton J. Hendrick. In this article the author prefaces by calling attention to the indictment of Mr. Bernard Shaw in his play, "The Doctor's Dilemma," which charges any cool-headed layman would acknowledge to be deliberately unfounded and false. Scattered opinions as to the fallacies and inaccuracies of medical practice must be passed over the same as observations directed against any line of work by those who have not made it their business to build a substantial foundation for the charges they are making, but when a publication of the character of this one lends space to and distributes broad-cast as unfair an attack as this, it becomes the duty of the profession to resent it in as forcible a manner as possible. For a man to declare in his sane moments that doctors as a class foster cases of imaginary illness and magnify trifling indispositions into serious maladies

for their own financial benefit and to obtain an aggrandizing cure is evidence either that the individual making such charges is willing to base his observations on a very narrow field of comprehension or that he himself is availing himself of the appetite of the public for extravagances and even false statements. No man who knows anything about public health as it is now being taught and widely practiced would venture the assertion that physicians dare not preach the reform of habits essential to the proper treatment of many complaints resulting from intemperance of any sort and particularly so if it was his desire to present the truth instead of sensational accusation. To say that surgeons constantly perform unnecessary operations and physicians make unnecessary and expensive visits is to place oneself on a pedestal of judgment rarely attained by anyone to say nothing of the uninformed scandal monger. Then to declare further that medical ethics and medical etiquette serve as cloaks for a huge conspiracy of silence against the public for the protection of the individual doctor and the concealment of his errors is as brazen a lie as ever emanated from the lips of man.

While due allowance might be made for such statements when coming from the pen of as erratic an individual as Bernard Shaw, yet the seriousness of the charges when apparently supported by as eminent a medical authority as Dr. Richard Cabot merit decisive and active refutation at the hands of the rank and file of the medical profession. For Dr. Cabot to claim that he can verify each and every one of Mr. Shaw's statements in his own practice with the addenda that Mr. Shaw is probably not conscious of the failures made in this country toward the correction of such evils, is merely adding sop to insult.

While it is undoubtedly true that there are certain fallacies in the code of ethics and even the revised principles of ethics under which the medical profession of our country operates, yet both represent the true spirit of their respective times and offer a working basis for the conscientious physician who will not go very far wide of the mark when he observes them. It is but natural that the details of such an organ must needs be modified to satisfy the times just as the basic organ of any well-established government must be changed to conform with the issues of progressing ages.

There can be no question about the fallacies that arise from misrepresentations from doctors, whether it be in the form of so-called therapeutic lies or other forms of concealment discussed by the author, such as those professional secrets

which will work harm to innocent parties or misrepresentations concerning fees so rife at the present time in the form of the commission evil. And without doubt the most potent remedy for combating these charges lies in the pursuance of a strictly honest and honorable course by every man in the profession, one that will place him beyond the reach of all scandal-loving tongues. There are times, of course, when the conscience of every doctor must serve as his own best guide for action and it behooves him to pursue a strictly honest course at all times.

THE COUNCIL ON PHARMACY AND CHEMISTRY

It is quite possible that the rank and file of the medical profession has not appreciated the epoch making work of the Council on Pharmacy and Chemistry of the A. M. A. This may be due to unfamiliarity with the work of the Council as also to the misleading statements that have been put forth continuously and persistently by manufacturers of pharmaceutical specialties.

The Council was established for the purpose of creating a sort of clearing-house for the good, bad and indifferent preparations of unknown composition and worth, with a view to giving the medical profession a trustworthy opinion as to the value of the preparations which are offered them and the sincerity and honesty of the claims put forth by the manufacturers. Many manufacturing pharmacists have given their cooperation in the work of the Council and have supported the findings. Others have opposed the Council more or less violently and refused to give that body the slightest consideration. The opposing firms almost invariably have been guilty of questionable practices in the manufacture and marketing of certain proprietary preparations, and their opposition to the Council is based on a knowledge that their products and the manner of exploiting the same would not stand inspection. Their detail men and salesmen have made every endeavor to poison the minds of medical men concerning the work of the Council, and some firms have even boasted that they would eventually put the Council out of business. In short, the whole attitude of those who have opposed the Council to the greatest extent has been one of commercialism of the rankest sort. With them it is not a question of manufacturing proprietaries or other preparations that shall be honestly made and honestly represented, but to produce something that can be sold irrespective

of virtue, or, if the preparation has virtue, to grossly exaggerate that virtue with a view of increasing sales.

In spite of the open opposition or the lack of support, the Council has gone on steadily in the work of examining and passing on the various preparations that are offered the medical profession for use, and it is worth remembering that in all the history of the Council there have been no sustained objections to the published findings. This in itself speaks volumes for the fidelity and accuracy with which the work of the Council has been performed. There are those who try to make out that the Council is unprepared to make the investigations that are attributed to it; but nothing can be farther from the truth. The Council is composed of a large number of men selected with a view to securing men of especial fitness for the positions, and products passed by the Council not only receive consideration in the laboratory, but, whenever necessary, are thoroughly tested in a clinical way. Clinical findings are not based on the opinion of one or two men, but are the result of the experience of many, for the Council does not issue an opinion which, in its judgment, cannot be sustained abundantly by the facts.

It is recognized that many manufacturing pharmacists intend to be honest, but most, if not all, of their work is so tinctured with commercialism that it is an easy matter to have the judgment warped and to employ methods that will not bear the closest scrutiny, and to make claims which are so exaggerated as to mislead and work damage to the trusting physician and his patient. This is bound to be the case where the primary object of the man of business is one of profit. It was with a view to creating a clearing-house where the truth or falsity of claims put forth can be established at the hands of competent and trustworthy men that resulted in the creation of the Council on Pharmacy and Chemistry. The ability of the Council has been unquestioned, and practically the only criticism that has been offered has arisen purely and alone from objections to the findings of that body.

In general, the regulations governing the acceptance or rejection of products are such as to meet with the approval of all honest manufacturers. Whenever and wherever a firm has found it necessary to openly fight the Council, investigation will show that the manufacturer has been guilty of irregularities which deserve criticism, and because he was profiting or thought he would profit by the irregularities he refuses to correct them in response to the opportunity offered by

the Council. In fact, it is known that some of the greatest sellers are the biggest frauds, and because the manufacturer is making large profits it makes him an enemy of any action that seems destined to deprive him of his profits. The question of whether his preparation is a fraud is one of minor consideration if the profits keep up.

We do not say that the Council is infallible, or that in some instances it has not been rather hypercritical, but the fact that so much misrepresentation, deception and fraud have been uncovered is quite sufficient to justify a leaning toward rigid regulations. Even this is not objected to by the conscientious manufacturing chemists, and it certainly should not be objected to by the medical profession in whose interest the Council is acting. The Council deserves and should have more general support by the medical profession, and an effort should be put forth to keep in touch with the work that the Council is doing. We cannot go astray in following the conclusions of the Council, and if there are reasons why we should not uphold the findings it is our privilege and our duty to consider the matter with the Council and determine the facts in a manner that will leave no room as to the justice of the position taken. The work that has already been done is of an epoch-making character and it has been the means of raising the standard of quality and efficiency in drugs and therapeutic specialties. It deserves the support of both manufacturers and physicians, but it is not to the interest of the manufacturers to cooperate with the Council unless the medical profession insists on it. We urge on the medical profession of Indiana the importance of insisting that the findings of the Council shall be respected.

THE ABDERHALDEN REACTION IN PSYCHIATRY

The diagnosis of pregnancy by the method of Abderhalden has become a routine in many American clinics; but the diagnosis of mental diseases by this method is practiced in Europe alone. The work of Fauser, Wegener, Fischer and Neue, beginning a year and three months ago, and continuing week by week and month by month, has placed this diagnostic measure at the service of all psychiatrists.

The principle on which the test is established is readily understood. Foreign, dead or dissociated albumin in the animal body acts as a poison to the blood and arouses in it, by methods not necessary to discuss here, a specific protective

ferment. Among the properties of this ferment the most obvious one is its ability to break down (catabolize) that special albumin molecule that aroused the blood to produce this ferment. This ferment cannot break down any other albumin molecule any more than the key to one Yale lock can unlock another apparently similar lock. The result of this broken-down albumin molecule is a peptone and amino-acid. The albumin is colloid and adialysable. The peptone and amino-acid are crystalline and easily pass through dialysers. The ferment has the catabolizing power not only in the blood, but also in the test-tube.

It is easy, therefore, to determine what organ in the animal body is undergoing destructive processes, for the liberated albumin of this organ in the test-tube outside the body is catabolized by the blood-serum (containing the ferment) taken from patient's arm. Such is the method, then, that the catabolized albumin in the form of peptone and amino-acid passes through a dialyzer and is recognized by the ninhydrin test in the dialysate.

When this test is used with the blood-serum of a healthy person and albumins taken from brain, from thyroid, from lung, from liver, from pancreas, from kidney and from each of the other organs of the human body (taken from a cadaver of a person killed suddenly by accident), no reaction takes place; but when the serum used is from the blood of a sick person then the organ of the body that is diseased in that sick person is picked out. The albumin from this part is peptonized and passes through the dialyzer and gives the violet color of the ninhydrin reaction, and we can say positively that, for example, the liver is diseased.

Among the insanities, the manic depressives give no reactions by this method, but the dementia praecox patients show a reaction to pancreas, and, if males to testicle, if females to ovary. Moreover, when catatonic or in certain irritable stages, they show a positive reaction to thyroid and brain cortex also.

The first reports from Fauser were so astounding that they did not attract much attention in America, though his work was credited in Germany from the first. Since that time, however, he has gone on with his researches and he has been ably seconded by Wegener of Jena, who has recently reported on more than 3,000 examinations of 600 patients in Binswanger's clinic.¹ He used thirteen fundamentals, *Substrate* or organ albumins. Among the patients studied were 229

1. München. med. Wchnschr., Jan. 6, 1914, lxi, 15-17.

cases of dementia praecox, all of whom had the ferment in their blood-serum that catabolized albumin of the genital glands, testicle if male, ovary if female. No case of manic depressive insanity gave any reaction.

The latest publication on this subject by Fuchs and Fremd² indicates that besides the reaction to the genital glands the blood-serum of dementia praecox patients gives reactions to the pancreas. If this is so it brings us one step nearer the solution of the problem of the etiology of dementia praecox.

One of the earliest and most constant symptoms of dementia praecox is loss of weight, and one of the earliest signs of improvement is increase in weight. Again the acetone breath is a symptom of every exacerbation. The abdominal and digestive symptoms are very conspicuous in the patient's mind in the early stages of the disease, and constipation and abdominal distress of a very depressing nature are generally complained of. In the whirl of intoxication, the sexual glands are involved. It has long been known that there is an intimate relation between the function of the upper digestive tract and the sexual function. This is not alone the result of good feeding, though it may be akin to it.

So far as these researches have gone, they show the great value of the Abderhalden reaction in the diagnosis of the several forms of insanity. They also give certain indications of the researches to be pursued to further advance our knowledge of the etiology of the methods of treatment and prevention, and even of measures of cure.

The time is now passed to psychoanalyze patients with dementia praecox. This condition is no longer a dream or a "twisted idea," or a psychogenetic perversion of function. It is a mechanistic process, susceptible of investigation, amenable to rational explanation and possibly subject to prevention and cure.

GWATHMEY'S OIL-ETHER RECTAL ANESTHESIA

The administration of ether vapor by rectum, for surgical narcosis, which at one time was thoroughly studied, never acquired general recognition and has, indeed, fallen quite into disuse. This was largely because of the severe proctitis that so often resulted. To obviate this and retain the advantages of anesthesia by this route,

Gwathmey (*N. Y. Medical Journal*, Dec. 6, 1913) has devised a simple method by which he introduces into the rectum liquid ether in which is mixed (dissolved) a quantity of olive oil varying inversely with the patient's age. The dose is regulated according to the age and weight of the patient. In children below 6 years of age a 50 per cent. solution is employed. It is increased in strength in older patients, and above the age of 15 years a 75 per cent. mixture is employed. As a general rule, about one ounce of the mixture is given for every 20 pounds of weight. The preparation of the patient is the same as for any operation, emphasis being laid on thorough cleansing of the rectum. The mixture is poured into the rectum very slowly; through a catheter and funnel; about five minutes is consumed in pouring in 8 ounces, the amount usually required. Anesthesia begins in about five to twenty minutes. If cyanosis or embarrassed respiration ensues, which are signs of an overdose, it is merely necessary to evacuate some or all of the mixture. After the operation, the rectum is washed out and some olive oil is poured in.

Gwathmey presents the advantages of this method as follows:

1. The element of apprehension and fear caused by placing a mask over the face in inhalation anesthesia is avoided.
2. No expensive apparatus is required.
3. The after-effects of the anesthetic are reduced to a minimum.
4. A more complete relaxation is secured than with any other known method of administration.
5. The limits of safety are widely extended, compared with other methods.
6. A more even plane of surgical anesthesia is automatically maintained than is possible by any inhalation method—unless administered by a skilled anesthetist using a perfected apparatus.

He refers to no disadvantages. His report was based on a series of 100 cases. In all of these the method was entirely successful, and there was no evil result. There was one death, that of an old man, twenty-four hours after the operation, probably not due to the narcosis.

This appears to be a satisfactory initial record of a procedure of such tempting simplicity that it would make unnecessary the services of an expert anesthetist.

We often find in medicine, however, that innovations which appear quite satisfactory to their introducers, and, at first, to others, develop defects on fuller observation. Gwathmey himself presents his report modestly and with the conservative observation that further trial is neces-

² München. med. Wchnschr., Feb. 10, 1914, 1x1, 307-310.

sary. If a few hundred or thousand cases show that the procedure is as free from danger as it is simple, it will be one of the most valuable contributions to the science and art of anesthesia that has been made in many years.—*American Journal of Surgery*.

MEDICAL FRAUDS

Write for a copy of the second edition of our pamphlet on Medical Frauds, which we have just published under the following foreword.

In the summer of 1913 we printed a pamphlet giving the composition and value of certain much advertised medicines and toilet accessories. The demand for this pamphlet was so great that the edition was soon exhausted. Gratified by the interest shown by the composition of the preparations so commonly advertised in the columns of the press as "health and beauty hints," we herewith present a greatly enlarged list made up of the fraudulent and near fraudulent preparations analyzed in our own laboratories.

Many of these goods as will be seen from the published analyses, are made up of the most common chemical which under a disguised name are sold at an exorbitant price. The virtues of epsom salts, sulphur, borax, cheap soap, baking soda, alum and table salt, seem to be astonishingly increased when they are sold under a non-descriptive name. Fifty cents an ounce is hardly too much to pay even for "exchange of spotty, muddy and sallow skin" for "one of indefinable rose petal purity," but when the preparation advertised to produce this magical transformation is ordinary epsom salts, one naturally wonders if the manufacturer of the preparation was not more interested in his astonishingly large profits than in improving "my lady's complexion."

Most of the preparations analyzed are made and distributed by so-called pharmaceutical houses under such confidence-compelling names as that of Dr. Lewis Baker, who by his residence at College Building, College-Ellwood streets, merits double assurance of his profound learning and the ethical character of his preparations; Mrs. Mae Martyn with her health and beauty hints, and Valeska Suratt, the wonderful actress, famed like many other less palpable benefactresses, for self-made beauty, have burdened the public with excessive bills for the cheapest and most common chemicals.

If we could let the public into the confidence game by which it is possible to sell these cheap and often worthless chemicals, we believe that

the millions now spent by credulous women and misguided men would either be saved or expended for real medical advice and helpful treatment. But to many, medicine is still a kind of a black art, and the worthless fraud of the beauty column and the skilled physician's prescription, if bought over the drug store counter, have equal value to the over-confident user. The fact that ethical medical practice uses each year fewer drugs and is substituting a good food, fresh air, proper exercise and regular mode of living for the nauseating draughts and disgusting compounds so freely dosed out by the practitioner of former generations is still not generally known.

The manufacturers of these goods, which are of the class commonly called prescription proprietaries, have carefully, and in most cases successfully, avoided any violation of the food and drug laws. The labels and the package carry no statement as to their composition, and little argument for their worth. Indeed, after one has been convinced by reading "health and beauty hints" that canthrox, spermax, vilane powders and parnotis, will, like a magician's wand, dissolve their troubles and sweep away their many ills, statements on the cartons and package are quite unnecessary.

It is impossible for us to tell the truth to the thousands who waste their money in the purchase of such goods. We hope, however, that the facts in this circular may in time become common knowledge through the press, clubs and schools.

Help to cut down the cost of living by telling these facts. Remember always that there are two reasons why the preparations listed should not be used. First, as medicinal preparations they are of little or no value, and second, that they are common chemicals which can be purchased at any drug store for one-tenth the price asked when sold under disguising names.—*Monthly Bulletin, Indiana State Board of Health*.

THE EFFECT OF HEAT ON BLOOD-PRESSURE

As the clinical value of careful blood-pressure studies is becoming more and more generally recognized, it becomes necessary to take cognizance of the various factors which can be definitely proven to have a constant effect on this function. This is particularly true in view of the fact that we recognize so many possible sources of variation in our readings. For instance, it is perfectly plausible to suppose that

an individual with a well-recognized cerebral, coronary or splanchnic sclerosis may not show much change from the normal in the pressure of his accessible arteries, such as the brachial. With a recognition of this and other well-known shortcomings we are yet able to obtain in certain cases some very valuable information from careful blood-pressure studies.

Recently¹ there have appeared the results of a study on the effects of heat on blood-pressure, by Newburgh and Lawrence. The authors point out the fact that for some time there has been recognized in most infectious diseases a progressive fall in blood-pressure during the course of the infection, supposedly due to a loss of tone in the vasomotor center in the medulla, heretofore thought to be the effect of the toxin of the infection on such center.

The study by these observers was undertaken in the effort to ascertain whether or not this lowered blood-pressure of infection might not be the result of the increased body temperature, common to all infections, rather than to the infection itself. It has been definitely proven by Halliburton, Marinesco and others that degrees of hyperthermia occasionally seen in infections cause morphological changes in nervous tissue, and lower temperature sufficiently prolonged will produce effects identical with higher ones. In a study of this kind, the relaxing effect of heat on smooth muscle must be kept in mind in its bearing on the constant constriction of the arterial tree necessary to maintain an efficient blood-pressure.

The experimental procedure pursued by these observers consisted in anesthetizing rabbits and cats with urethane and placing them in a copper tank containing sufficient water at body temperature to cover the animal except its head, the water in the tank being heated by means of an insulated electric resistance-coil. The temperature of the water and the rectal temperature of the animal were recorded.

In all, fourteen experiments were performed, and in the first group the temperature of the animals was rapidly raised, the first effect of the heat being a progressive rise in blood-pressure. However, at a temperature of between 108 and 110 F., the pressure began to fall and so continued to do until the end of the experiment.

In order to rule out the possibility that the results obtained were due to the extreme heat rather than those degrees of heat which characterize infections, further experiments were performed wherein the heat was not allowed to

become excessive. In these cases a well-marked fall in blood-pressure at a degree of hyperthermia not exceeding that met with in infections occurred and this before any organic changes due to hyperthermia could be expected. A control was run with the animal kept at normal temperature and no such fall occurred.

From physiologic experimentation it has been pretty definitely proven that vascular tone is largely dependent on nerve impulse and that during activity catabolic changes are more rapid while anabolic changes predominate during rest. Hence, while heat might induce an increased tone of the vasomotor center in the early stages, such period might well be followed by a later period of diminished tone because of nerve cell exhaustion. The authors do not feel warranted in excluding a peripheral effect on the heart from the heat and admit the possibility of both factors, namely, the effect on the vasomotor center as well as the peripheral one on the heart due to local relaxation of smooth muscles in the arterial walls, as being responsible for the results observed. However, they do feel justified in the following conclusions:

1. In lower animals degrees of hyperthermia not greater than those encountered in infections are sufficient to cause marked hypotension.
2. The increased body temperature of infection is a potent factor in the production of the lowered blood-pressure which occurs in such conditions.
3. The hyperthermia may be the entire cause of such hypotension.

EDITORIAL NOTES

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

How many doctors in Indiana are familiar with the principles of medical ethics? For the good of all, we suggest that one night in each year be devoted to the reading and discussion of the principles of ethics by the members of every county medical society in the state.

SECRETARY COMBS reports unusual promptness on the part of nearly all the members of the Association in paying dues for 1914. On February 1 there were fewer delinquents than ever before, and there was also a large number of new members. The increase has necessitated the printing of a larger edition of THE JOURNAL.

1. The Archives of Internal Medicine, Feb. 15, 1914.

THE Editor of THE JOURNAL has received many responses to the request for volunteers to take part in the Conservation of Vision work. However, more volunteers are needed and it is hoped that at least two or more physicians—preferably oculists—in each county will agree to give lectures or talks before lay audiences on the Conservation of Vision.

OUR subscribers ought to get in the habit of reading the commercial announcements, and, for that matter, all of the advertising in THE JOURNAL. Not infrequently doctors offer practices for sale, or perchance an opportunity is given for the purchase of some kind of equipment at greatly reduced prices. Our department devoted to commercial announcements is the place to look for wants.

THE San Francisco County Medical Society maintains a scrap book which contains newspaper clippings concerning members. Doctors who permit themselves to be exploited through newspaper articles find cold comfort from the fact that the public records of such acts are not only permanently filed, but are always open to the inspection of fellow practitioners. The Los Angeles County Medical Society has adopted the same feature.

CONCERNING quacks and quackery we desire to call the attention of our readers to the crusade that has been inaugurated by the principal of the Jefferson High School, LaFayette, Indiana. The plan and its manner of operation are described in a letter from the president of the Tippecanoe County Medical Society, printed in this number of THE JOURNAL. We commend the enterprise and activity of Professor Pierson to others who are interested in exposing medical frauds.

THE Chiropractors' Association of Pennsylvania has been refused a charter by the Supreme Court of the state. The refusal of the charter was based on the ground that the applicant has no legal status under the medical practice act. It is worth mentioning that so far as we know the chiropractics have no legal standing in any state and yet continue to practice medicine within the full meaning of the law, and Indiana is burdened with a large number of these pseudo doctors.

THE *New Mexico Medical Journal* says that fee-splitting "is an awful commentary on the honor and integrity of a so-called learned profession. A physician accepting a fee which is

not earned has betrayed a trust and is not worthy to associate even with highway robbers." The editorial concludes with the announcement that there is no fee-splitting in New Mexico, and we are wondering if the purifying atmosphere of New Mexico is responsible for this desirable state of affairs.

You ought to patronize the advertisers in THE JOURNAL of the Indiana State Medical Association because THE JOURNAL is your journal and such advertising brings two-fold returns: First, by giving you the very highest quality in goods purchased; second, by giving you a larger and better journal. Prove to the advertiser by reciprocity that it pays to advertise in THE JOURNAL. You want a good journal. It is up to you. Say to the advertiser, "I saw your 'ad' in THE JOURNAL."

SOME months ago we published the details concerning a new blackmailing scheme that has been worked on unsuspecting physicians in Indiana. Our account was republished in numerous medical journals and we have since learned that the blackmailing scheme which was tried in Indiana has also been tried in other states. We are very much pleased if we have been the means of acquainting a large number of medical men with a scheme that seemed destined to get many unsuspecting physicians into trouble.

THE *Medical Fortnightly* makes a plea for the standardization of laboratories and insists that the fitness of those who present themselves to the profession as laboratory experts in the making of various diagnostic tests should be determined. The argument is put forth that the findings of an incompetent in the laboratory may do untold harm. A positive or a negative Wassermann from such an one may be a positive crime. The incompetency of a laboratory worker may not be discovered until untold harm has been done.

THE recently organized College of Surgeons has received more or less vituperative denunciation from certain medical men and a very limited number of medical journals. The time is not ripe for either criticism or denunciation. The College has put itself plainly on record as opposed to graft in any form, favoritism, the establishment of a surgical trust, or the control of politics. Until it is found that the College deviates from the principles that have been laid down, it would be well for the critics—most of whom are airing a personal grievance—to hold their tongues.

JUST now we are hearing much about radium, and both the lay and medical press are full of articles relating to the use of radium and its salts in the treatment of various diseases. We are not prepared to pass any opinion as to the value of radium, but we desire to remind our readers that certain radium preparations have been passed by the Council on Pharmacy and Chemistry, and accordingly we have accepted the advertising of radium preparations. The therapeutic value of radium is still a comparatively unknown quantity, and we shall be very much interested in having clinical reports from trustworthy sources.

THE enterprising secretary of the Lake County Medical Society says that it should not be the duty of any secretary to go around with a piece of lead pipe in one hand and a receipt book in the other in an endeavor to force members to disgorge the amount of dues for the current year. We quite agree with him. Every doctor should be proud of the fact that he is a member in good standing in his local medical society, and he ought to have sufficient pride to keep up his credit in that organization. Failure to pay medical society dues does not speak well for the doctor, and the reputation hurts among medical men as well as with the public if acquainted with the facts.

THE prevention of medical advertising quackery, so strenuously advocated by the A. M. A., is gradually assuming a definite place in the municipal affairs of all our large cities. The *Chicago Tribune* was one of the first to take up the fight against advertising quackery, and this was soon followed by a similar campaign on the part of the *Post* in St. Louis. Quite recently there is evidence to the effect that some of the large newspapers in eastern cities, notably New York, will follow suit. Added to this is the declaration of the Postmaster General that a relentless war will be waged against medical frauds by the Postoffice Department. The credit for this awakening goes to the American Medical Association, where it rightfully belongs.

THIS year's session of the Clinical Congress of Surgeons of North America is to be held in London July 27 to August 3. Many medical men will take advantage of the opportunity to have a short trip abroad, and aside from attendance at the Congress which our London confreres announce will be of unusual excellence, an opportunity will be offered for a visit to the

foremost surgical clinics, in all the European capitals. Several specially conducted tours are planned whereby those who go in a party will have the advantage of not only reduced rates, but certain facilities concerning visits to clinics and hospitals that otherwise would not be available to the individual traveler. To those who are contemplating a trip abroad this year, we suggest the advisability of writing the secretary of the Clinical Congress of Surgeons.

THE editor of *The Critic and Guide* advocates the limitation of offspring, and maintains that the laws against the prevention of conception are brutal, anachronistic, and were put on our statutes by ignorant medievalists and narrow-minded bigots, altogether out of touch with modern thought and the necessities of modern civilization. To stimulate the study of the question of the limitation of offspring, he offers to debate the following subject: "*Resolved*, That the knowledge of safe and harmless means of preventing conception would prove of the greatest benefit to the human race, and that the laws against the dissemination of such knowledge should therefore be abrogated, as opposed to the interests of humanity." He proposes that \$1,000 shall be posted by each of the contestants and that the winner use the money in furthering humanitarian propaganda.

SINCE publication of New and Nonofficial Remedies, 1914, the following articles have been accepted for inclusion with "N. N. R.":

Amphotropin (Farbwerke Hoechst Co.).

Trypsin (Fairchild Bros. & Foster).

Phenolsulphonephthalein, H. W. & Co.; Phenolsulphonephthalein Ampoules, H. W. & Co. (Hynson, Westcott & Co.).

Anti-Anthrax Serum, Mulford; Antistreptococcus Serum Scarlatina, Mulford; Disinfectant Krelos, Mulford; Salicylos; Staphylo-Serobacterin; Strepto-Serobacterin; Typho-Serobacterin (H. K. Mulford Co.).

Essence of Pepsin, Fairchild: The Council had agreed to the request of Fairchild Bros. & Foster that the product "Essence of Pepsin, Fairchild" be described in N. N. R. under the new name "Pepsencia," but later reconsidered this action. The product is included in N. N. R., 1914, on page 110, under its old title "Essence of Pepsin, Fairchild."

THE teaching of sex hygiene is to be tried out in the Chicago public schools. This is to be expected, for Mrs. Young, the new superintendent, has introduced a number of innovations, not

all of which have received the approval of educators and the public. We feel disposed to agree with the Rev. Father J. W. Melody, Professor of Moral Philosophy in the University of Washington, who says: "Mental enlightenment does not act as a moral deterrent. Life is a continuous warfare between the higher and lower faculties. The only hope is a sense of responsibility to a personal God. The will is that psychology something which enables us to subject those lower instincts. A grave danger lies in the teaching of sex hygiene. I do not adduce from mystic theology, but from psychology. The way to avoid danger is to flee from it and refrain from discussing it. I do not envy Mrs. Young her responsibility."

IN view of the antivivisection crusade that is being carried on by certain fanatics, with a criminal disregard for truth, it is refreshing to find such a well-known periodical as *Puck* standing boldly in defense of vivisection as carried on at present under humane rules. In its issue of March 14 *Puck* has a double-page cartoon on the logic of vivisection which tells the story better than words. In contrasting the attitude of *Puck* with that of *Life*, we are reminded that it is fortunate for the progress of medical sciences that human life has a few influential protectors like *Puck* among lay publications. We have no fault to find with those who fight for a principle, but when in order to win it becomes necessary to resort — as *Life* does in its attitude toward vivisection and everything pertaining to medicine — to deception, misrepresentation and actual falsehood, we believe that the cause has very poor ground to stand on.

DR. A. JACOBI of New York, familiarly termed "the grand old man of medicine," stands little show of being eulogized by our temperance friends. In a paper on alcohol medication in *American Medicine* for September, he gives the records of a few desperate cases in which life was saved by the use of Whisky. His argument is that in the mixed infections whisky is next to a specific. To a boy of 3 years of age with the formidable symptoms of mixed infection he gave a pint of whisky daily for several days. The child lived, but during the stage of improvement showed evidence of being drunk, and Dr. Jacobi remarks that that was a welcome occurrence, for he knew that no amount of whisky will lead to intoxication when its effect is wanted to combat sepsis. So long as his little patient did not longer require his big dose of alcohol to combat

infection, it made him intoxicated. He is a strong believer in the use of whisky to combat sepsis.

ONE good effect of the Income Tax Law will be the necessity for the adoption of better business methods on the part of physicians and a more careful and systematic method of keeping accounts. It is quite possible that a limited number of physicians have a net income of over \$4,000 per year, and yet we venture to say that a very large proportion of doctors are unable to say just what income they enjoy and what proportion of it is used to pay expenses directly connected with the profession. Even though a doctor is not so fortunate as to have an income which makes him liable for the income tax, yet he must remember that his income is subject to inquiry on the part of the tax collector who may ask for a definite account of income and expenditures, and books will have to be produced to substantiate the statements made under oath. Therefore, it behooves every doctor to begin keeping book accounts, and in particular a record of all receipts and expenditures.

OXYDONOR is a fraudulent quasi-medical device advertised for use in the treatment of any form of disease, and to be used exclusive of all drugs and medicines. It is advertised in Lippincott's Magazine, published by the J. B. Lippincott Company. It is well to remember that the J. B. Lippincott Company are also medical publishers, and, aside from a number of medical books, they publish a journal known as "*The Annals of Surgery*." Evidently the J. B. Lippincott Company is not very particular as to the manner in which an income is derived if we may judge by the character of the advertising carried in its publications. This is evidenced by the fact that Oxydonor is advertised in their magazine, and *The Annals of Surgery* carries advertising of practically all of the objectionable and fraudulent proprietaries exposed by the Council on Pharmacy and Chemistry of the A. M. A. Isn't it time for the contributors and subscribers to the *Annals of Surgery* to begin to take notice?

NOT infrequently we hear of alarming hemorrhage and occasionally a death directly following the operation for the removal of adenoids and tonsils. This is bound to be the case as long as physicians continue to operate these cases in the office or in the patient's home and without proper after care. The operation is a hospital operation, and we are quite in sympathy with the

resolution concerning this subject passed by the public health committee of the New York Academy of Medicine, which is as follows:

"*Resolved*, That it is the sense of this committee that all operations on the tonsils should be performed in hospitals or in such dispensaries as are provided with operating rooms and with recovery ward facilities.

"*Resolved*, That private hospitals of the city be requested to cooperate with the health department of the city in the operative care of children with enlarged tonsils and adenoids; that these hospitals provide proper and adequate facilities for such cases and that the city compensate the hospitals for this special service; and further, that the hospitals be requested to provide similar facilities without special compensation."

NOTICE TO COUNTY SECRETARIES.—In accordance with instructions received at the annual session in 1912, letters were sent to all delinquents after Feb. 1, 1914. These letters were sent on the supposition that the county secretaries had been unsuccessful in obtaining the dues, and that perhaps an appeal from the State Association would be more effective. Answers to these letters, however, indicate that in many cases the county secretaries had made no attempt to get the dues and the member had become delinquent without notice from his own county society, and he was, therefore, incensed at the letter received. Most of the delinquents are remitting promptly, and it is therefore proper to state that the fifteen dollars which was spent in notifying the 500 delinquents was in a large measure an unnecessary expense and caused unnecessary ill feeling in the membership. There is no reason why every county secretary should not have sent at least two notices before February 1 to each member, so that the letter from the State Association would not have come as an unwelcome surprise.—CHAS. N. COOMBS.

UNDER the title "High School Credentials for Sale," *The Journal of the A. M. A.*, of February 7, gives an illustration of irregular methods by which commercially conducted medical colleges admit students contrary to law. The proof is offered to show that a would-be medical student assuming to come from an adjoining state and stating that he had completed only one and one-half years in a high school, succeeded, through Mr. O. T. Owen, registrar of the Bennett Medical College, in securing from the Balfour Johnstone School, apparently the same institution as the Brooks Classical School, a certificate supposed to represent the equivalent of a high-school education. This certificate, which was signed

by Mr. John J. Kerwin, County Superintendent of Schools of Kenosha County, Wis., was obtained after a pretense at an examination, both the questions and the answers having been previously furnished the student. Even then, such writing as was required for the examination was done in his own room. The certificate thus obtained was accepted at the Bennett Medical College and on it this student was enrolled as a freshman student in that college.

DR. LYDSTON and a few other blatant disturbers in Chicago are making a great hue and cry about illegal elections of the A. M. A. and the so-called unfavorable court decision in the case brought by Dr. Lydston to show that the A. M. A. has not conducted its affairs according to law. As the Board of Trustees of the A. M. A. has published a statement concerning the matter, it is unnecessary to review the subject, as most of our readers are familiar with the matter as they are also familiar with the animus which has guided Dr. Lydston in his persistent efforts to create trouble and dissension in the ranks of the A. M. A. Dr. Lydston has secured a great deal of notoriety as a result of his fight against the A. M. A., and he evidently enjoys it. Quite naturally he has had the support of a lot of manufacturing houses and their tools, the more rotten of the independent medical journals, but it is not hard to discover the reason. Jealousy, personal spite, and a natural tendency to oppose anything in the line of progress is the basis of the opposition. It is fortunate that the majority of the members of the A. M. A. fully understand the animus which prompts such vituperous antagonism.

CHRISTIAN Scientists howl a great deal about the beauty and the value of truth, and are forever preaching about honesty and sincerity as being a part of right living which means health and the highest spiritual existence. However, they deviate so much from what they preach that we are often led to believe that their conception of what constitutes truth is entirely different from the idea possessed by the rest of common mortals. *The Journal of the A. M. A.*, in the issue of February 7, calls attention to the positive evidence of deliberate and intentional misrepresentation and falsification on the part of the *Christian Science Monitor*, and of carefully laid plans to give such deceptive material the widest publicity possible on the part of the leaders of the Christian Science Church. The particular instance referred to is the garbled quota-

tion from *The Journal of the A. M. A.* which appeared in the *Monitor* under quotation marks, but without including the essential qualifying phrases, in which it is made to appear that there is little danger of adults acquiring a new infection from contact with consumptives. As *The Journal of the A. M. A.* well says, "It is impossible for this sect to disavow any longer its deliberate purpose to obstruct and hamper in every way possible the campaign for the prevention of disease and the saving of human life."

IN this day and age the average doctor has hard work keeping his head above water. Many factors enter into this condition of affairs, but the one that is most prominent is the tendency on the part of the state and municipalities to assume the prerogatives of the medical men. The multiplicity of hospitals and dispensaries where gratuitous services are rendered, and the free vaccination, free antitoxin, free laboratory service, free medical care and the growth of the lodge and contract practice have lessened the possibilities with the average physician to earn a comfortable income. Aside from all this, the demands on the medical practitioner in the way of knowledge and equipment has never before been so exacting. This paternalistic attitude is largely due to the medical profession which has ever been interested in the public welfare, irrespective of personal gain and ultimately the practice of medicine and surgery will be almost wholly under state control and subject to whatever regulations are deemed sufficient to secure for the people the high quality of service that they now enjoy. When that time comes, medical men will find themselves occupying positions that are governed by rigid restrictions, and the income from which will not be in keeping with the time and money expended in preparing for the work and the responsibility of the position. The question arises as to whether or not we are justified in beginning a fight for self-preservation.

EVERY doctor is more or less familiar with Sal Hepatica advertising. It has been carried in numerous medical journals and in numerous ways has been placed before the public. The report of the Council on Pharmacy and Chemistry says that Sal Hepatica has been refused recognition by the Council because its composition is secret; because it is advertised indirectly to the public for the treatment of diseases; because exaggerated and unwarranted claims are made for its therapeutic qualities; and because the name fails to indicate its chief constituents,

but does suggest its use in liver disorders. In concluding the report, which should be read by every physician, the secretary of the Council says (*Journal of the A. M. A.*, Feb. 7, 1914): "It is recommended that this report be authorized for publication in order that physicians may know the extent to which they have been made to act as advance agents for patent medicines. It is hoped its publication may suggest to those who in thoughtlessness have recommended Sal Hepatica, that they go to their materia medica and renew acquaintance with the host of simple and efficient laxative salts which are available—magnesium sulphate, sodium sulphate, sodium phosphate and the palatable effervescing preparations of these which the Pharmacopeia provides—effervescent magnesium sulphate (*Magnesii Sulphas Effervescens*, U. S. P.), effervescent sodium phosphate (*Sodii Phosphos Effervescens*, U. S. P.)."

SECRETARY COMBS has a note in this number concerning the failure on the part of county medical society secretaries to send out notices asking for payment of dues. We are disposed to approve the plan of sending out notices, but why not place some of the responsibility where it belongs? Every doctor in Indiana who belongs to a county medical society knows that his dues are payable on January 1, and become delinquent on February 1. The majority of these doctors have been reminded time and again by their county secretaries that dues should be paid before February 1, and THE JOURNAL begins harping on the subject at least two or three months before time for paying dues. The truth of it is the average doctor is a careless, indifferent sort of a chap who gets and deserves a bad reputation for his business dealings. He procrastinates in the payment of his dues when he knows perfectly well that by so doing he is working injury to himself, to the secretary of his county medical society, to the secretary of the State Association and even to THE JOURNAL. When he finally wakes up to the fact that he is delinquent, the easiest way out of the difficulty is to blame it on to some one else instead of on himself where it rightfully belongs. The man who has ever been secretary of a county medical society can vouch for the truth of all we say concerning not only the carelessness and indifference with which many doctors look on the subject of paying medical society dues, but the brazen effrontery with which the claim is put forth that no notice has been received as to the fact that the payment is due. No notice should be required when dues

are regularly payable on January 1, and though it is purely an act of courtesy on the part of the secretary to send the notices, we hope the practice of sending the notices will not be abolished.

ONE of our Chicago exchanges announces that the recently organized College of Surgeons is contemplating the establishment of a school for surgeons, and that Dr. W. J. Mayo has presented the advantages of Minneapolis as a location for this school. The Chicago editor then goes on to say that if such an institution is contemplated the promoters should not lose sight of Chicago as a proper place for such a school.

We are under the impression that if the College of Surgeons had the slightest idea of founding a school of surgery, Chicago would be the last place on earth that it would ever consider as a home for such an institution. Some of our Chicago editors say that Chicago is the hub of the universe so far as medicine and surgery are concerned, but we are inclined to believe that it is the place where more hell in the medical profession is raised than any other place in the United States. In fact, there is a very strong sentiment in the medical profession that a very grievous mistake was made when Chicago was selected as the home of the A. M. A., for no more unfriendly place could have been selected for the headquarters of our national organization. Chicago has some very noted men, and others who are notorious. It also has some very estimable medical men, and others (majority) who are not worth powder to blow them up. Unfortunately, the Windy City produces some windy doctors, and they create more disturbance in medical circles than all the rest of the faultfinders in the medical profession. Seemingly there would be for the establishment of a school of surgery in Chicago when that city is so inhospitable to everything which has a semblance of honesty and progress. No, by all means give the college of surgery to some other city, and find a new home for the A. M. A., unless the egotistical, jealous-minded disturbers who now think they are putting Chicago on the map are silenced.

THE *Illinois Medical Journal*, apparently dissatisfied and disgruntled with everything that is progressive, fair and honorable, takes an ugly fling at the Mayos of Rochester, by reproducing an announcement sent out by the Chicago & Great Western Railway, unbeknown to the Mayos, in which attention is called to the sleepers and train connections to the Mayo Clinics. After reproducing the advertising, the query is

offered "Will the Minnesota State Medical Association stand for this or will the same brand of whitewash be applied that was used in skilfully devised articles in certain lay magazines?" A more contemptible piece of journalistic effort was never put out by a periodical having any claim to decency. Fortunately, the Mayos need no defense, for cleaner, more unassuming and more highly ethical physicians than those connected with the Mayo Clinic have never lived. The late Professor Senn, in commenting on the prominence and popularity of the Mayos, said, "It's a trick, and the trick is to do everything just a little bit better than anyone else." Therein lies the history of the great achievements and success of the Mayos, and therein lies the reason and the only reason for the bitter criticisms that have emanated from some quarters. Those who achieve prominence in any line of endeavor must expect to be criticized by the envious and are bound to receive more or less gratuitous advertising, sometimes of the most blatant and objectionable form, and irrespective of the wishes or even the knowledge of the ones who receive it. The Mayos are no exception to this rule, and while a certain amount of publicity has been given to the phenomenal work that has been accomplished by the Mayos, yet we believe that such publicity was not only distasteful to the Mayos, but that they in every possible way have endeavored to prevent such publicity. The remarkable thing to us is the fact that the Mayos have escaped as well as they have, for had they shown the slightest tendency to exploit themselves they would have adopted a course that has been followed by not a few of the prominent medical men in this country in submitting to press interviews on every conceivable occasion. But the *Illinois Medical Journal*, under its present management, would not be content if it was not digging in the mud and the mire. It is clearly destructive rather than constructive in its policies, and we wonder how long the medical profession of Illinois will stand for such a disreputable journal.

THE power of advertising is shown no more clearly than in the history of Sanatogen, the pretentious and fraudulent claims for which have been exposed by *The Journal of the A. M. A.* Sanatogen, which has been called the "new elixir of life," and has been shown by the Council on Pharmacy and Chemistry to be the equivalent of a combination of cottage cheese with a small amount of glycerophosphate, is sold for a price that is extortionate and under a misrepresentation.

sentation that would do credit to the most blatant of advertising quacks. *The Journal of the A. M. A.* says, "We believe that a large and unfortunate portion of the public that can ill afford it, is paying a ruinously high price for a substance having very mediocre food value. That indigent consumptives, for instance, should be led by flattering falsehoods to squander on Sanatogen money that should go for food tonics of infinitely greater value, such as milk, vegetables and meats, is not only economic waste, but inhuman cruelty." But the worst of the matter is that, despite the exposures of the Council on Pharmacy and Chemistry, and the unmerciful scoring which Sanatogen receives in the special pamphlets issued by the fraud bureau of the American Medical Association, there are certain independent medical journals which are carrying the Sanatogen advertising, and when some of the lay publications, with a keener sense of honesty, refused to take the Sanatogen advertising the argument was advanced that Sanatogen had been considered by the medical profession as a great scientific discovery, and that as such the Sanatogen advertising is carried by some of the large weekly medical journals of the country. How in the name of common sense, and with anything like a clear conscience, a medical editor can continue to prostitute his journal for financial gain when there is the slightest question as to the character of his transactions, is beyond us to fathom. These Judas-like editors will continue the policy of selling the advertising pages of their journals to fakes and frauds just as long as the subscribers for those journals are willing to tolerate such a thing. It is nothing short of a disgrace to the medical profession that we should be burdened with medical journals making any claim for decency that are such a stumbling block in the way of progress in the great work being done by the American Medical Association to purify the atmosphere of medical frauds. To those who want to know what Sanatogen is, we suggest that a bulletin on Sanatogen, issued by the Department on Nostrums and Quackery of the A. M. A., be procured.

ON January 1 the Workmen's Compensation, Insurance and Safety Act went into effect in California. By the terms of the law all employees, excepting a few classes, must be cared for by employers in the event of injury by accident, and the salary or wages must be paid during forced absence from work. It is quite evident that the employer will take advantage of insurance policies which protect him against loss,

and in that event all of the expenses incurred in connection with injury or death of employees will be cared for by the insurance company. This means that all bills for medical and surgical services will be paid by the insurance companies and not by the employers of labor. This also means that the fees for such services will be ridiculously low if the usual customs of insurance companies are to be taken as standard. On the face of it it looks as though the California physicians were due for a good "squeeze" in the amount of fees secured in accident cases unless they take a united stand in a righteous demand for proper compensation. Here again will come up the question of unity on the part of the profession, and strong pressure will be required if here and there a few good men, bent on getting all the business they can get, do not break away from professional as well as business ideals and accept the contract practice offered by the insurance companies. As we have frequently stated, medical men are more and more subjected to restrictions, legal and otherwise, which prevent them from securing just and adequate compensation as well as suitable redress from wrongs, and it all comes about through their failure to unite in a common cause. They war among themselves, are jealous of each other's successes, and they seldom unite in a common purpose. It is no wonder they are subject to embarrassment and are imposed on by those who know that retaliation is doubtful or negative. What has occurred in California is going to occur in every state in the Union, and it is well for medical men to be prepared for the features which are destined to make California physicians dissatisfied with their lot. We have no particular fault to find with the law that has been passed in California and which probably will be passed in other states, but we do believe that the medical profession will have to rise up as a unit and fight the tendency existing among insurance companies as well as corporations to pay ridiculously low fees for medical and surgical service. The highest skill is required, but it is neither the desire nor the intent of insurance companies to pay adequate fees for such service. It is up to the medical profession to decide whether it will be a unit in opposing the effort to saddle small fees on the doctors of this country.

THE Christian Scientists of Massachusetts bid fair to be excluded from the list of persons who are practicing medicine within the meaning of the law. If they succeed in accomplishing the

desired results it will be possible for them to attend any sufferer, no matter what the ailment, and be relieved of any penalty in the event of bad results. We are interested in knowing just how the rule is to apply to contagious diseases, as also in cases of child-birth, injury and many other conditions which are supposed to require the services of a registered physician. The greatest harm will come to the ignorant and those who cannot help themselves, as for instance, the children. If some Christian Scientist of mature age and supposedly supplied with the usual amount of gray matter is willing to subject himself or herself to Christian Science treatment for the relief of pain from a stomach full of green apples, which a stomach pump would promptly eradicate, or prefers blind faith and readings from Mrs. Eddy's book instead of a few good doses of antitoxin for the relief of diphtheria, we believe in letting such imbeciles have their own way, but we do think that there should be a law preventing the subjecting of defenseless children to any such idiotic treatment. In Indiana to our certain knowledge a few children, without much doubt, have lost their lives through blind adherence to Christian Science healing instead of pinning faith to a few well-placed doses of antitoxin. We know of one woman with an abdomen full of pus from a ruptured appendiceal abscess and another woman with a ruptured ectopic pregnancy, both of whom died under the ministrations of a Christian Science healer, and we venture to say that both women would be alive if a good surgeon had had the cases. The police arrest a man if he attempts to take his own life by drowning or shooting himself with a revolver. Why not make an endeavor to protect the same men from being the dupes of a lot of religious fanatics who, incited by the psychologic effect in the cure of some imaginary diseases and other diseases having a mental disturbance, have jumped at the conclusion that such treatment is good for all the ills to which flesh is heir? They seem to think, and even claim, that they can lay aside all the rules of physics as well as anatomy and physiology, and the unfortunate part of the whole business is that there are many thousands of people who are willing to believe such tommyrot. That Christian Science has been a benefit to a certain class of neurotic or impressionable people, no one can deny, but that it is applicable to every disorder of humanity is a fallacy which is working great harm and increasing the morbidity and mortality rate among those who blindly follow the teachings of Mrs. Eddy.

STOP! LOOK! LISTEN! Are you one of the "easy marks"? The traveling salesman of a drug house making fake medical specialties and cheap drugs, most of which have been exposed by the Council on Pharmacy and Chemistry of the A. M. A., says that doctors are "easy marks" and that he can sell them anything his firm manufactures, no matter whether the Council has disapproved of the products or not. What a compliment to doctors! And the worst of it is, we are forced to believe that the statement is partly true. Don't you know that a preparation that receives the approval of the Council possesses virtue and quality, and that disapproval of the Council means lack of quality and lack of virtue? Why use fake remedies and cheap drugs when you can obtain those of unquestioned quality and merit? Don't you know that *THE JOURNAL* every year refuses hundreds of dollars' worth of advertising of fake pharmaceutical specialties and worthless drugs (and we need the money, too) in order to place before you the advertising of products of unquestioned quality? Don't stand in the way of your own progress and the progress of others. Be an up-to-date "live wire" in the medical profession and support honesty and progress. Don't buy drugs and pharmaceutical specialties of unknown composition and action, and don't depend exclusively on the word of the manufacturer as to the composition and value of his products. The findings of the Council show that very few manufacturers can be credited with always telling the truth about their products. The smooth detail man is paid to represent—and more often to misrepresent—the goods he sells, and his employer is not in business for his health or to prove his church affiliations. All manufacturing pharmacists are not intentionally dishonest, but so many of them are so that as a matter of protection it is necessary to have a check on them. The Council is the one and only means that the medical profession has of protection from the manufacturer who intentionally or ignorantly misleads. Remember that the Council is organized and operated purely for your protection and benefit, and that you should profit by its findings. Remember also that *THE JOURNAL* is carrying no objectionable advertising, but only such as receives the endorsement and approval of the Council. Therefore, we urge you to patronize *THE JOURNAL's* advertisers and to let them know you are doing so. If a firm is fighting the Council, you can depend on it that "there's a reason," and the reason is generally opposed to your best interests. *THE JOURNAL* has a reputation second to none of the state

journals, and you should help to sustain that reputation. THE JOURNAL'S advertisers are worthy of your confidence and if they were not they would not be advertising in THE JOURNAL. When you patronize some of the fake concerns who are fighting the Council and who could not advertise in THE JOURNAL you are hurting the reputable manufacturers who deserve support, you are hurting THE JOURNAL which is attempting to protect your interests, and above everything else you are hurting yourself. Therefore, profit by the remark of the traveling salesman and don't be an "easy mark." Let us all pull together.

THE Conference of the Secretaries of the State Medical Associations held in Chicago, February 25, was notable in the point of attendance, as there were thirty-seven states represented. The conference was very helpful as a means of exchanging ideas and comparing experiences, but the meeting itself did not consummate a plan which has been a long felt wish for the American Medical Association, and that is a scheme of uniform membership with the system of transfer from one state to the other. At present there is no reciprocity between state medical associations, and it was hoped that membership in the American Medical Association would entitle one to membership in any constituent association without reapplication. After all other objections had been disposed of, there remained an effectual barrier which always prevents country wide uniformity, as some of the southern states have the word "white" written into their constitutions. It was suggested, however, that the plan could be adopted providing that the individual instance should not be contrary to the constitution of any constituent state association. Uniformity in the fiscal year is now practically universal, as few states found any hindrance in conforming to this requirement. It was still very evident that an endless diversity existed in respect to the methods of bookkeeping, collecting the dues, making reports, etc., in the various associations, and no two associations could agree on a common plan. Dr. Holman Taylor of Texas offered as a solution to this problem the suggestion of the American Medical Association employing an efficiency expert to visit the different state associations, acquainting himself with the details of organization and offering suggestions concerning increasing the efficiency and eliminating red tape, waste and mistakes. Many of the states reported difficulty in carrying out an intricate scheme of triplicate receipts, such as Indiana uses, on account

of hopelessly careless and indifferent county secretaries, and the very fact that our plan is working with remarkable ease and efficiency is the best tribute that has ever been paid to the Indiana county secretaries. The sending in of the duplicate receipt by the county secretaries to the state secretary has been a means of more promptly adjusting the status of physicians as contrasted with the former plan of having the secretaries wait until they had accumulated quite a list of members, remitting in a lump sum. It seems that if this system could be changed so as to include a receipt or stub which would go to the American Medical Association simultaneously, it would be a means of making a physician a member of the state association and the American Medical Association as soon as he has paid his dues to his county society without further delay or correspondence. Since the Indiana secretaries are trained as they are, it would be a matter of small difficulty to introduce this change.

The discussion at the conference developed the fact that in many instances it was a bad policy for a state association to retain on its membership list physicians living in other states. Perhaps they were reputable before they moved away, but have departed from the code of ethics in the meantime and the home county society has no means of learning of this. As we have the rule that within the state a physician cannot belong to another county society without permission from the society existing in the county in which he lives, the rule should be interpreted to include permission from county societies in other states to which one of our members has moved. This permission, of course, would be withheld so long as the member in question was in bad standing in the profession. As a matter of fact, the rule should be made even more stringent in stating that no physician shall retain his membership in this state association after practicing medicine for a period of more than one year in another state. In fairness, however, this rule should be adopted by other states so that they will not be permitted to continue Indiana physicians on their lists.—CHAS. N. COMBS.

DEATHS

EDWARD FUNK, M.D., died at his home in Corydon, February 17; aged 40 years.

W. H. BECK, M.D., of Hartsville, died February 11, of senile debility; aged 87 years.

MRS. VIRGINIA E. WILLIAMSON, widow of Dr. PORTER E. WILLIAMSON, an old-time practitioner of Grant County, died at the home of her son in Marion recently.

J. ALBERT COOKE, M.D., of Goshen, died at the Toledo Hospital, February 25, of Hodgkin's disease. Dr. Cooke was 40 years of age, and a member of the Indiana State Medical Association.

H. M. HARVEY, M.D., former physician of Evansville and Vanderburg County, died at Washington, D. C., February 19, after being afflicted for twenty years with locomotor ataxia; aged 74 years.

JOB OGBORN, M.D., died at the home of his daughter in Reynolds, February 12; aged 92 years. Dr. Ogborn was one of the old school physicians, and for thirty years practiced medicine in Lafayette and the adjoining country.

O. L. SCHROCK, M.D., of Greentown, died February 17, following an accident on the previous Sunday, when his sleigh was struck by an inter-urban car and he suffered serious injuries including a fractured skull. He was 33 years of age.

HIRAM J. COON, M.D., died at his home in Colfax, February 27, from apoplexy; aged 62 years. Dr. Coon was chief surgeon of the Big Four and Vandalia railroads, and vice-president of the surgeons' Association of the Pennsylvania Lines.

HOWARD R. LOWDER, M.D., died at his home in Bloomfield February 13, of heart failure; aged 69 years. Dr. Lowder was born in Lawrence County, Indiana, in 1845, attended the public schools, and in 1861 enlisted in Company F, Forty-Third Indiana Infantry, devoting four years to the service of his country. He took up the study of medicine under Dr. F. W. Beard of Monroe County, graduated from the Medical College of Indianapolis in 1875, began the practice of medicine at Parke, Greene County, and moved to Bloomfield eighteen months later, where he has since remained in active practice. Dr. Lowder was for several years a member of the U. S. Pension Examining Board, served several terms on the local school board, and was an active member of the Greene County Medical Society, the Indiana State Medical Association and the American Medical Association, having served several terms as president of his county medical society.

NEWS NOTES AND PERSONALS

INDIANAPOLIS

DR. CARMACK has recently recovered from a severe attack of septic tonsillitis.

DR. T. VICTOR KEENE was the unfortunate victim of an automobile accident in which he suffered a fracture of his forearm.

THE annual banquet of the Phi Chi Medical Fraternity occurred at the Claypool Hotel, Saturday evening, February 28. A number of visiting members from out of the city were present.

MISS MABEL WYSONG, daughter of Mr. and Mrs. E. Wysong, 2003 West Michigan Street, and her brother, Ernest Wysong, have gone to Kimberly, Nev., where Miss Wysong will be married immediately on her arrival to Dr. K. W. Hidy, and they will make their residence in Kimberly.

DR. NELL ROBINETTE of Boise, Idaho, formerly of Indianapolis, who returned to this city in December on account of ill health, and was operated on, has recovered and is at the home of her brother, J. M. Rhodes, 2406 North Capitol Avenue. She will return to her home in Boise about the middle of March.

IN commemoration of the fortieth anniversary of his active practice of medicine, Dr. W. N. Wishard gave a dinner Friday evening, February 27, at the Columbia Club, to all of his former hospital and office associates, of whom there are about forty. Among many others, about seven physicians residing outside of the state responded and were present. Letters were read from physicians now living in California, Colorado and Minnesota. A beautiful loving cup was presented to Dr. Wishard, and a most delightful time enjoyed by all those present.

THE Annual Faculty Reception to the Seniors of the Medical Department of the Indiana University School of Medicine, occurred Friday evening, February 27, and was held in the Library of the College building. While the attendance was small, due partially perhaps to rather disagreeable weather conditions, the affair was nevertheless a very enjoyable occasion. A light buffet lunch was served followed with cigars. Dean Emerson made a characteristically forceful talk, using the proceedings of the Board of Med-

ical Education of the A. M. A. as a text. No one who heard him could fail to appreciate the seriousness of his intent nor his determination of purpose to guide this school through the devious paths of its infancy to the high ground of full grown merit, to which his ideals have constantly led him.

GENERAL

DR. D. C. SMITH of Frankfort, who recently underwent a serious operation, is recovering.

DR. B. E. MILLER of Albion has recently been appointed town Health Officer for the ensuing four years.

DR. FRANK SMITH of Gary has recently been elected Republican Chairman of the Tenth Congressional District.

DR. W. G. RALSTON of Princeton, one of the oldest physicians in the state, celebrated his 95th birthday, February 13.

DR. H. E. WARD of Anderson has recently located at Chester, Ohio, where he will continue the practice of medicine.

DR. P. L. ROBISON of Bluffton was quite painfully injured February 14 as the result of being struck and run over by a buggy.

THE Medical Section of the American Life Convention held their fourth mid-year meeting at French Lick, Ind., March 4, 5 and 6.

DR. W. S. WALSH was recently appointed physician at the Marion County Asylum for the Poor to succeed Dr. A. L. Marshall, who resigned.

THE Fort Wayne Medical Laboratory has been incorporated with a capital of \$5,000 by Dr. Bonelle W. Rhamy, Mary Rhamy and Robina L. Orvis.

THE citizens of Michigan City met at a mass meeting February 20 and organized an antituberculosis society, of which Dr. J. B. Rogers was made president.

THE May issue of the *Medical Review of Reviews* is to be a Woman's Number, and all the articles contributed will be from the pens of women physicians.

DR. E. R. SNYDER of Troy, Ind., has been elected County Health Commissioner of Perry County. Dr. Snyder is president of the Perry County Medical Society.

DR. M. M. CLAPPER of Hartford City will spend the summer in New York City and Europe. Returning from Europe in September he will go to California for the winter.

DR. M. H. YOUNG returned to his home in Brazil, Ind., February 15, after spending some time in post-graduate work in New York City, Pittsburgh and Philadelphia.

DR. GEORGE T. MACCOY of Columbus, Ind., was married February 17, at Dayton, O., to Miss Bird Stapp of Chattanooga, Tenn. They left immediately for a Florida trip.

BY the will of the late Dr. J. A. Cook of Goshen, the Goshen Hospital will receive a legacy of between \$2,500 and \$3,000. Dr. Cook was secretary of that institution at the time of his death.

MRS. G. W. H. KEMPER, wife of Dr. G. W. H. KEMPER of Muncie underwent an operation for a malignant growth at the Methodist Hospital, Indianapolis, on February 15. She is making a satisfactory recovery.

DR. IVAN E. BRENNER, who for the past year has served as intern at the Protestant Deaconess Hospital at Indianapolis, has located at Winchester, Ind., and will be associated with Dr. B. S. Hunt in the practice of medicine.

THERE were eighty-three cases of small-pox in the city of Indianapolis during January, and during February the disease increased to such an extent that an order compelling vaccination of all schoolchildren under penalty of exclusion from the schools was issued by the Health Department.

THE annual meeting of the State Society for the Study and Prevention of Tuberculosis was held at Indianapolis January 31. Drs. Henry B. Shacklett, New Albany; S. Edgar Bond, Richmond; Fred A. Dennis, Crawfordsville; Eric A. Crull, Fort Wayne, and James A. Snapp, Goshen, were elected directors.

THE county and city boards of health of Lake County have formed themselves into an organization known as the Lake County Health Officers

Association for the purpose of warring on unhealthy conditions in Lake County and fighting for better sanitary conditions in every city and hamlet in that county.

ROSSELL PARK, M.D., the well-known surgeon and medical writer, died at his home in Buffalo, February 15; aged 62 years. Dr. Park was professor of Surgery at the University of Buffalo, surgeon to the Buffalo General Hospital, author of a text-book on surgery and a history of medicine. He attended President McKinley, fatally shot in 1910.

THE United States Public Health Service has completed the sanitary survey of the schools of Bartholomew County, and report the conditions as very good. Of the 3,969 children examined, 38.67 per cent. had defective teeth, 14 per cent. had enlarged tonsils and forty-eight cases of well-marked trachoma was found. The establishment in rural districts of central or consolidated schools was commended.

DR. G. W. H. KEMPER of Muncie, one of the oldest and best known physicians of Indiana, ex-president of the Indiana State Medical Association, and at present Councilor of the 8th District, completed fifty years of practice in the city of Muncie on March 2. In an article in the *Muncie Morning Star* of March 2, Dr. Kemper gives many reminiscences of his fifty years of practice, recalling experiences as assistant surgeon of the Seventeenth Regiment Indiana Volunteers, his early mode of traveling on horse-back to see his patients down to the present day traveling in automobiles, the marked progress in medicine and surgery since he studied medicine and his connection with the political, moral and religious welfare of the community. Among other literary works, Dr. Kemper has given to the medical profession a valuable medical history of Indiana.

CORRESPONDENCE

THE ELIGIBILITY OF NON-PROPRIETARY MIXTURES

To the Editor:—Physicians and publishers of journals who wish to adhere to the recommendations of the Council on Pharmacy and Chemistry are herewith reminded that non-proprietary mixtures are deemed by the Council as eligible for prescribing and advertising, without the necessity of being admitted to New and Nonofficial Remedies.

Strictly non-proprietary mixtures of official substances, etc. (for instance, morphin and atropin tablets), are generally sold without any special claims which would make them subject to investigation by the Council; while the number of these combinations listed by the various manufacturers is so great that even their mere enumeration in New and Nonofficial Remedies would be practically impossible. The intelligent physician is the best judge of the advisability of prescribing ready-made non-proprietary mixtures of this type. The danger is that he may not always be able to discriminate clearly, on the one hand, between these non-proprietary mixtures that are not listed in New and Nonofficial Remedies because their admission would be superfluous, and on the other hand, the proprietary mixtures which do not appear in New and Nonofficial Remedies because they have been refused admission. The appended definition of "proprietary mixtures" shows where the line is drawn by the Council.

PROPRIETARY MIXTURES.—A mixture will be considered as proprietary and therefore requiring consideration by the Council and admission to the book or appendix, if it contains any proprietary article, if it is marked under a name which is in any way protected or if its manufacturer claims for it any unusual therapeutic qualities.

All mixtures to which this definition applies are deemed proprietary and will be listed by name in New and Nonofficial Remedies, if they comply with the rules of the Council.

In all doubtful cases, the secretary of the Council will gladly supply specific information.

W. A. PUCKNER,

Secretary of the Council on Pharmacy and Chemistry,
535 North Dearborn Street, Chicago.

ANOTHER CRUSADE AGAINST MEDICAL FRAUDS

LA FAYETTE, IND., March 1, 1914.

To the Editor:—The present crusade against quackery inaugurated by *The Journal of the American Medical Association*, *Chicago Tribune*, and in a small way several county medical societies, has been the inspiration of a plan that, in our judgment, will be more far-reaching and effective than any yet brought to our attention.

In September, 1913, William A. Pierson, Professor of Physiology in the Jefferson High School, LaFayette, Indiana, asked that the members of the class bring to school all newspaper advertisements of patent medicines and quack doctors. A

member of the class was furnished with a copy of "Quacks and Quackery," published by the American Medical Association, and the enthusiasm thus created led to a search of the offices of several physicians for literature along that line, together with a daily search of local and other newspapers giving space to such advertising. By this method Professor Pierson succeeded in creating a wonderful interest in the student body, which was carried into their homes and among their friends. It was soon evident that the Professor, without any fuss, noise or loud talk, had caused an overwhelming sentiment among the students that the matter became a topic of almost constant conversation, and several times, to our knowledge, when a druggist attempted to sell a patent medicine containing a habit-forming or otherwise harmful drug, his attention was promptly called to that fact.

Professor Pierson even invited some of the quacks advertising wonderful cures to come before the class, on certain conditions, and explain their wonders so that the students could discuss their methods. (It is needless to state that they never came.)

Early in the year 1914, the excellent work being done under the leadership of Professor Pierson was brought to the attention of the Tippecanoe County Medical Society, and he was invited to address the society on February 9. His address explained the plan he had followed in inaugurating his crusade against patent medicine frauds and quackery in the Jefferson High School, and the society was unanimous in its approval of his work. His statistics with reference to the great amount which newspapers were devoting to this class of advertising was a surprise to the members of the society. At the close of the address Professor Pierson was elected to honorary membership in the society.

The Tippecanoe County Medical Society believes that the Jefferson High School is the pioneer school in the fight against quackery; and that a similar department should be a part of the curriculum of every school.

Professor Pierson's purpose in this line of instruction is to conserve the health of the student by educating them so that the flowery claims made in the advertisements of quacks and nostrum venders will have no other effect but to disgust them. It certainly is producing the effect intended.

Very truly yours,

R. M. CAMPBELL,

President, Tippecanoe County Med. Soc.

SOCIETY PROCEEDINGS

FORT WAYNE MEDICAL SOCIETY

Meeting of October 21

Society met in regular session in assembly room with twenty-four members present. Meeting called to order by President Gross. Minutes of preceding meeting read and approved. Clinical case night.

Dr. C. C. Grandy reported the following case: Mr. C., aged 30, railroad trainman. Previous history negative. Seven months ago first noted sharp pain in left knee radiating up inner side of thigh. Thought it rheumatism. Palpation revealed nothing. Knee and thigh same size. X-ray shows a necrosis of lesser trochanter of left femur. Von Pirquet positive. Temperature 101 to 102 while in hospital. A plaster spica was made with a window cut out over lesser trochanter to allow sunlight to strike affected area.

DISCUSSION

Dr. Porter: This picture shows that upper portion of femur is also involved. There is a big shadow of doubt because of location of lesion as to whether it is a primary one or not.

Dr. M. F. Porter reported following case: First called to see patient suffering with what was thought to be appendicitis. Found a woman, mother of two children, suddenly taken ill a couple of days before, at which time she had a pain in belly which made her faint, but she did not lose consciousness. She had a recurrence of this pain several times during two days following; no vomiting. Last menses appeared on time. She had some slight return of menses. No anemia. Pulse 100, quality good. Tenderness all over belly. Vaginal examination shows a tender vaginal vault. No tumor in pelvis. No abdominal rigidity. Basing my diagnosis on the history, absent rigidity and menstrual regularity, I concluded that we were dealing with a case of tubal abortion. Blood-count negative. On operation, right tube contained a ruptured pregnancy. Tube removed. Points of interest in this case are differential diagnosis between appendicitis and inflammatory lesions of tube and conditions of tube found in this case.

DISCUSSION

Dr. B. Van Sweringen: I want to offer a suggestion regarding fever in this case. Three days before she was operated she had some increase of temperature. It is not necessary to invoke infection to account for this fever. In case of hemorrhage, a rise in temperature is probably due to absorption of fibrin ferment.

Dr. C. E. Barnett: The tube being blocked shows that we have had an infection. Best point in case is differential diagnosis between appendicitis and ectopic gestation.

Dr. Porter, closing: I agree with Dr. B. Van Sweringen's remarks, but this case had about two quarts of blood in the abdomen when I began to operate. No attempt was made to remove this blood. She did not have post-operative fever. Loss of blood accounts for the increase of temperature along with mere presence of this clotted blood in peritoneal cavity.

Dr. Beall reported case history of a patient with persistent diarrhea. Examination of stool showed actively motile trichomonads. The case has had attacks of what has been called "summer complaint" on and off for a number of years.

Dr. Rhamy: I have seen several cases of this kind. Every case which I have had has had severe diarrhea. From my experience with this condition, I believe that monads are an etiological factor in most cases.

Dr. Edlavitch: There is no doubt that in some cases these organisms are pathogenic and are an etiological factor.

Dr. Beall, in closing: We made, at the I. S. F. M. Y., an examination of a hundred stools from normal cases and found this organism quite frequently.

Dr. McCaskey reported the following case: Male, 70 years of age, was taken with chill and high fever. No physical signs obtainable. Spinal puncture negative. Blood for culture showed pneumococci. Temperature 103. Patient died in a few hours. A child had died of pneumonia in the house of this patient forty-eight hours before I saw him.

There is one report in literature of the use of ethylhydrocuprine in cases of this type. This case received marked benefit. Work was done in a German laboratory. One-half gm. three or four times a day is injected into circulation. It should be used early in the disease.

Dr. B. W. Rhamy presented a paper on "Bacteriology of the Urine."

DISCUSSION

Dr. Edlavitch: It is very important in obtaining a specimen of urine for pathological examination to get an uncontaminated specimen. If physicians themselves would get the specimens we could eliminate one source of error. This point is of importance in differentiating between tubercle and smegma bacillus. Typhoid carriers are of common occurrence and are an example of excretion of typhoid bacteria in urine. It is very important to know from the very beginning if urine in a case is excreting tubercle because urine is just as infectious as is sputum. *Vibrio* of cholera bacillus is also excreted by urine and is a great source of infection. It has only recently been known that diphtheria bacillus is excreted by kidney. Even after patient is completely recovered from diphtheria, bacilli have been found in urine and have produced death in guinea-pigs on injection. Therapeutic value of urotropin in clearing up infections of genito-urinary tract is well known. This drug is not a panacea, but its results are good and readily exceed our expectations in some cases. One hundred grains daily is not in excess of common dosage, careful attention being paid to the patient's complaint of symptoms referable to urinary tract.

Dr. Grandy: In making vaccines from urine I have had a bacillus and a diplococcus in the smear, and in plating out these cultures have found changes in each.

Dr. C. E. Barnett reported a case in which actinomycosis was found from culture from urine in a case presenting symptoms of frequent urination, pain and passage of blood.

Dr. McCaskey: I have often given thirty grains of urotropin daily and urine test is made to determine if we are having excretion of drug in urine. In one of my cases of infection of genito-urinary tract which occurred through presence of decubitis in which a colon bacillus infection of the spinal canal occurred, 100 grains were given in twenty-four hours.

Dr. Porter: Asked Dr. Rhamy's opinion of reason for appearance of tetanus germs in urine. Is it possible that these germs passed through blood stream without giving the patient tetanus?

Dr. McCaskey: Demonstration of chain of lymphatics running from cecum to right kidney perhaps accounts for more common infection of right kidney.

Dr. Rhamy, closing: Regarding lymphatic connection with kidney, I mentioned this because it is mentioned as one of many avenues of infection of kidney. In regard to tetanus infection, I would not like to say that these bacteria came from blood stream, but I tried to be careful in obtaining specimens. Points mentioned by Dr. Grandy are important. I have observed this fact often.

Motion carried that ladies be present at annual dinner. Motion carried that secretary and president act as committee to arrange for dinner costing \$2 per plate. Adjourned. G. VAN SWERINGEN, Sec.

Meeting of October 28

Met in regular session. Meeting called to order by president with twenty-two members present. Minutes of preceding meeting read and approved.

CLINICAL CASES

Dr. G. W. McCaskey reported a case of amebic dysentery of thirteen years, duration cured by emetin-hydrochlorid. Amebic dysentery is not rare in northern latitudes. Rogers has shown emetin-hydrochlorid to be a specific amebicide. This patient had chronic diarrhea of thirteen years' duration with six to eight stools daily, all semi-fluid in character, containing mucus and occasionally blood. Examination showed numerous amebae. Blood showed a moderate polynuclear and eosinophilic leukocytosis. Examination otherwise negative. She was given, hypodermically, injections of emetin-hydrochlorid in two-thirds to one grain doses until four grains were given. Considerable nausea and abdominal distress followed its administration, but stools decreased in number and improved in character, some of them being formed. Five days later she returned with a relapse and the stools again showed amebae. After administration of four and one-half grains more, stools became formed with no mucus and no amebae. Patient has since remained well.

Dr. M. F. Porter: Case 1.—Female, 40 years of age, gave history of being confined to bed twelve weeks with fever, chill and abdominal pain. Leukocytosis with an increase in polynuclear count; secondary anemia. Physical examination shows nothing except right side rigidity. Bimanual examination shows a mass in broad ligament. Urine shows pus and staphylococci. No urinary symptoms. Laparotomy revealed hematocele in sealed tube left side, chronic appendicitis and further exploration showed gall-bladder full of stones. For three days patient did nicely; on fourth day had chill, fever and pain in left side of abdomen with rigidity. Urine contained a quantity of pus; there was tenderness over tenth, eleventh and twelfth ribs. A second incision was made over left kidney; drainage was instituted; thick pus present; microscopic examination of discharge does not show tubercle.

Dr. Weaver: This case bears out what Braasch said: "So many obscure abdominal cases reveal inclusion of the genito-urinary apparatus that he has become switched from his general work to that of genito-urinary work exclusively."

Dr. Duenling: There is always difficulty in establishing a diagnosis in some cases. A female, 16 years of age, four weeks ago had an attack of pain in belly

which was diagnosed as appendicitis. Leukocytes, 19,000; poly., 94 per cent.; mass in right side. Laparotomy revealed tubal abortion.

Dr. Porter, closing: Diagnosis was made in my case last week on several things, i. e., the sudden illness, recovery within a few days, recurrence, uterine hemorrhage without a missed period. In this nephritic abscess case, ureteral catheterization would have proved nothing as this left ureter is blocked.

Dr. Rothschild reported following case: Male, 33, Roumanian, tailor, married. Family history negative. Enlarged tonsils since childhood; usual children's diseases; influenza three years ago, high fever, sick eight days, good recovery; no venereal disease; has had pyorrhea alveolaris for two years. Present illness: For two years has had intermittent pains in feet which he calls rheumatism. Took baths at Martinsville and Benton Harbor. Last two weeks pains in swollen right knee, both feet, shoulders, arms and hands; at times he has night sweats; not much fever; temperature normal; pulse 72; heart and lungs negative; urine 1,018, slightly acid, negative, passes large amounts; bowels regular; leukocyte count 10,500; 76 per cent. poly.; from the gums there exudes quite considerable purulent discharge. A vaccine has been made from this infection which was a streptococcal infection, and he is being given this treatment with some improvement.

DISCUSSION

Dr. Dancer: This case illustrates to me several things. First, he had a quinsy two weeks ago. Is it not possible that his joint pains are a part of his general infection? I have been making cultures of these case of tonsillitis to use as a vaccine later on in their treatment.

Dr. McCaskey: That existence over a period of years of a focus of infection contributes to trouble in remote parts of body, is a well-known fact. In this case of pyorrhea alveolaris I am not certain that the infection is a local one. In this case I am not certain that the condition present does not result from tonsils. In a recent case of so-called "stomach trouble" the patient was given some "stomach medicine." Atophan was given but no change was found in the purin bodies. Found tonsil infection and pyorrhea from which streptococcus was isolated by culture. As to curing of pyorrhea by vaccines, it has been said that it has been done.

Dr. Duemling: Delharty and Tabel call attention to joint symptoms due to infection of blood stream through tonsil, which are quite common.

Dr. Porter: Suppose he has an infection of tonsil. Has he joint symptoms due to intoxication or to sepsis? Removal of tonsils alone will not cure these joint symptoms.

Dr. Duemling: Did it ever strike you that patients frequently come in with acute appendicitis following an acute gonorrhea or tonsillitis? This has happened too often in my practice to be mere coincidence.

Dr. Beall: Rosenau has probably done more work in this line than anyone else. Any point of suppuration in body may be source of these joint symptoms. It has been proven without any doubt that joint infections are same as those found in tonsils.

Dr. Weaver: Serum which has best action is not a unibacterial one, but a polybacterial one, because strains of bacteria are constantly changing.

Dr. Rothschild: I think these tonsils should come out, but perhaps we had best wait to see how much better he will get under vaccine treatment.

Motion carried that a committee of three be appointed by chair to investigate and report back to society on work now being done by the Fort Wayne Anti-Tuberculosis Society. Chair appointed Drs. Weaver, Dancer and Beall.

Adjourned.

G. VAN SWERINGEN, Sec.

INDIANAPOLIS MEDICAL SOCIETY

Meeting of January 6

Election of officers. Meeting called to order by Dr. Ferguson. Attendance 115.

Application of Dr. John G. Seifres read for first time. Minutes of preceding meeting not read.

Dr. Guedel, secretary-treasurer, read his report from Jan. 15, 1913, to noon of Jan. 5, 1914. This report having been audited by the council was adopted by the society.

The following officers were elected: President, Dr. T. B. Eastman; first vice-president, Dr. E. de Wolf Wales; second vice-president, Dr. J. W. Carmack; secretary-treasurer, Dr. Alfred Henry; councilors, Drs. Will Shimer and Norman E. Jobes; delegates to State Association, Drs. John Pfaff, Goethe Link and David Ross; alternate delegates, Drs. W. D. Hoskins and Albert N. Cole.

Dr. Chas. E. Ferguson delivered his address, "The Doctor's Vacation." Dr. Ferguson's address was a beautifully constructed picture of some things of interest seen by him during his visits to the Holy Land.

Meeting adjourned.

ARTHUR E. GUEDEL, Retiring Secretary.

Meeting of January 13

Meeting called to order by President Dr. T. B. Eastman at 8:15; attendance fifty. Minutes of previous meeting read and approved. Applications of Drs. Robert Dwyer and John G. Seifres were read for the first time and posted for thirty days. Application of Dr. W. F. Pennington read for second time and referred to council.

Dr. Tom S. Tomlin read a paper on "The Chronic Suppurating Ear-Pharyngitis and Treatment."

Paper was limited to conditions where suppuration is established. Chronicity of process is based upon two points—pathology and lapse of time. Some cases are pathologically chronic from supposed beginning because other conditions have been overlooked while others are chronic only from lapse of time after several months' duration.

Prophylactic measures are of two classes, provision for free uninterrupted drainage externally and by Eustachian route and maintenance of asepsis. Douches and powders are condemned as are meddlesome swabbing and mopping.

Diagnosis to be useful must include cause of suppuration and its chronicity. Both aural polypi and granulomata are results of suppuration and are prolific causes of chronicity of periostitis and necrosis and should with very rare exceptions be promptly removed. The important exceptions are when they are on the superior wall that forms part of cranial floor and when origin is obscured by protrusion through drum, and then methods to be selected with care with preparedness for further operative procedure.

Obstruction to Eustachian drainage precludes cessation except where radical mastoid operation is done including removal of granulomata at tympanic opening. Salpingitis, stricture of tube, adenoid or other growth in epipharynx, enlarged tonsils, especially if submerged, protruding inferior turbinates or other malformations, causing nasal occlusion, are all frequent and important factors. Conditions that prevent closure of pharyngeal opening lead to easy and repeated middle-ear infection. Swelling and hyperplasia around pharyngeal opening are of most importance as a basic point from which to seek further. Fistula with hearing present is debatable ground for delay or for operation, and in presence of such conditions either is hardly justifiable with less than two opinions.

The case reported is interesting from the point that 1, while having come from scarlatina and having lasted 21 years, hearing was fairly good.

2. Numerous factors in chronicity included granulomata in external ears, on one side over a dehiscence of bone having only soft tissue protecting meninges, a necrosis of short process of malleus, granular tissue occluding tympanic Eustachian opening on opposite side, adenoid tissue hindering drainage into pharynx and multiple polypi on suppurating ethmoids partially occluding both nasal passages.

3. With all these adverse conditions, process was terminated without resort to ablation of either mastoid or tympanum and hearing restored to 35/40 for both ears and patient recovered in general health and returned to complete college course.

Dr. Carl G. McCaskey gave a case report on "Aural Polypus of right tympanic membrane with impaction of cerumen of both external auditory canals."

Miss E. P., aged 14, history of scarlet fever at four years and measles at six, followed by acute otitis media; right ear continued to discharge at intervals until present time; five years ago patient complained of deafness.

Present history and examination.—Weight, 77; pulse, 78; temperature, 99; respiration, 22; nervous; air conduction poor, bone conduction good; external auditory canals filled with impacted cerumen; removal of this revealed polypus of this drum membrane which was removed by instillation of adrenalin 1-1000, which was allowed to remain for twenty minutes, then syringing brought away polypus en masse. Patient has had no recurrence of trouble since; hearing normal. Cerumen of left ear was removed by ordinary methods.

Dr. W. F. Clevenger reported cases of diphtheric complications with observations in two laryngo-tracheal and bronchial cases.

Mention of report of series of cases of primary nasal diphtheria read before society some years ago. Nasal type, when confined to nasal passages, of much less severity than when more direct lymphatic channels are reached, consequently frequently overlooked. A very potent source of infection of others.

Primary diphtheria below faucial region usually presumed to be laryngeal. Tracheotomy in a number of cases at city hospital and elsewhere prove this to be a fallacy. Trachea more susceptible to infection than larynx, hence more often seat of primary infection. This is of great importance as relating to the subject of intubation and tracheotomy. If trachea

and bronchi full of membrane, no method of intubation of value. Large doses of antitoxin early indicated in all types, to be repeated in four to six hours, according to indications. Location of membrane may be tentatively determined by point of primary infection and by auscultation.

First case, reported woman 42 years of age. Intubated and forced to remove tube at once. Tracheotomy was performed and entire lumen of trachea to bifurcation covered with heavy diphtheric membrane. Bronchi also involved. Death from toxemia and asphyxia in three hours.

Case 2: Boy of ten years. Intubated and forced to remove tube at once, due to closure of distal end with membrane. Tracheotomy showed trachea lined with membrane. Curved uterine forceps and Klaar electric light gave clear field to the bifurcation. Right lung completely blocked off, showing bronchi filled.

Emphasis on early internal medication, especially in trachea and bronchial type. Large doses of antitoxin. Intubation or tracheotomy in cases where membrane in larynx is secondary to faucial or pharyngeal type indicated if obstruction marked.

Dr. Daniel Layman reported cases of chronic purulent otorrhea with complications of mastoiditis, extra-dural abscess, sinus thrombosis and brain abscess. Three operations, recovery; an abstract of which follows:

A. McK., age eleven years, admitted to City Hospital, June 18, 1913. Complained of pain in right ear. History: Discharge from right ear for past four years. The case had been greatly neglected. General condition fairly well nourished; systolic mitral murmur at apex. Temperature, 102.2; pulse, 120; respiration, 24. Typical signs of an acute mastoiditis. On June 19, classical mastoid operation performed, at which an extensive extra-dural abscess overlying the sinus was discovered and evacuated. No clinical symptoms of sinus thrombosis obtained, nor did visual or tactile examination reveal clot, so that sinus was not opened. Nothing eventful in course of case until about June 27, when patient complained of pain for first time over right side of head and extending down into neck. This pain was temporarily relieved by a fresh dressing. In a few hours, however, the clinical symptoms of a sinus thrombosis were well enough established to justify opening sinus. This was done and a clot was removed, but on account of a free flow of blood from both the jugular and torcular ends, internal jugular vein was not resected. After posterior wound healed ear continued to discharge, the discharge being profuse and malodorous. As this continued for weeks without improvement, a radical operation was decided upon. At this operation, roof of tympanum or attic was found necrosed. On exposing dura it was found to be discolored and of a boggy appearance, protruding hernia-like through opening of bone. A slight incision was made through the dura, demonstrating pus, after which it was freely opened and about an ounce of pus evacuated from temporosphenoidal lobe. Cerebral abscess was drained with rubber tissue drainage. Radical operation completed, leaving a drainage through posterior opening. Case slow in healing. Cavity at present time is covered with epidermis, except a small granulating area on inner wall of tympanum. Extra-dural abscess over sinus was not indicated, but was discovered at first operation. Likewise the cerebral abscess was discov-

ered at time of radical operation. Clinical symptoms of a clot in sigmoid sinus were suspicious, and operation confirmed the diagnosis. Time was wanting for blood, spinal fluid and other laboratory tests. After recovery from sinus operation patient was up and about, not complaining, and even playing baseball in hospital yard. Even the most significant symptom of brain abscess was not noted, namely, constant, severe localized head pain, nor any of the focal (motor) signs. Kernig and Babinski were negative. Also there were no eye ground findings.

DISCUSSION

Dr. T. V. Overman: Diagnosis is often difficult. Tuberculosis and syphilis are frequent complications. Prognosis should be given guardedly. One case had tonsillitis, appendicitis, suppurative nasal discharge and double otitis media, respectively. Urotropin apparently effected a cure.

Dr. Barnhill: Chronicity does not matter. Restoration is important thing. Granulations are not disease—mere shadows. A discharging ear means decay and destruction. Dr. Tomlin is to be complimented on clearing up surroundings in case reported. Usually foolish to use dusting powders, which impair drainage and never reach place intended for them. A case suppurating four years with headache was relieved by family physician with morphin. Patient taken to hospital with remittent fever. Operation showed pus in jugular vein with every sinus on same side involved.

Dr. Sterne: Chronic suppuration of ear is dangerous. Radical procedure warranted. Cases sometimes often causes of neurosis. Relation of facial nerve to middle ear accounts for facial palsy. This condition with complications may produce facial paralysis. Always inquire into general condition of patient. Don't forget lues. Temporo-sphenoidal lobe oftenest involved. Cutting brain tissue causes no pain—traction on dura does. Urotropin is used by some instead of brain operations. It is an internal antiseptic.

Dr. Hoskins: Dr. Clevenger is to be complimented for reporting cases going bad. It is necessary to diagnose many probable bronchial cases of diphtheria as laryngeal. There is not always evidence of tracheal and bronchial involvement. Ninety per cent. of diphtheria is found below age of ten. Intubation gives relief and should be done.

Dr. Shimer: Koch, of Berlin, in his hospital work divides his cases of laryngeal diphtheria into three types; viz.: mild, moderately severe and severe. Antitoxin helps mild cases very little, moderately severe very much, and severe cases very little, even though tracheotomy and intubation are done. Antitoxin is introduced in right auricle.

Dr. Taylor: Cases reported by Dr. Clevenger were so thoroughly infected they were beyond help.

Dr. Page: More attention should be given to prophylaxis in chronic suppurating ears. Tonsillar tissue should be removed early in life before nasal and other impediments arise. Headaches are common.

Dr. Kitchen: Question on medical therapy. Was formaldehyd found in urine when urotropin was used? Dr. Overman said is was.

Dr. Tomlin, closing: The various tests are useless when hearing is present. Popular belief is that chronic discharging ears from infectious diseases are not amenable to treatment.

Meeting adjourned.

Meeting of January 20

Society called to order by President, Dr. T. B. Eastman, at 8:20, with 75 member present.

Applications of Drs. Dwyer, Neely and Auble were read for first time and posted for thirty days. Dr. Pennington was elected to membership.

Dr. O. N. Torian read a report of the Medical Milk Committee appointed in 1908.

"Problems in Diagnosis of Tumors of Breast," by Dr. Murray N. Hadley.

When radical operation for breast carcinoma was first performed and practiced it was hoped that mortality of practically 100 per cent. would be greatly reduced. This hope has been by no means fully realized and we now know that when cancer of breast has advanced sufficiently to give signs of its presence, a mortality of 70 or 80 per cent. is to be expected.

The profession is now fully realizing its importance in treatment of cancer, and absolute necessity of attacking disease in its very earliest stages or even in precancerous lesions. A full realization of this fact has prompted and initiated a campaign of public education on matters relating to cancer. If this campaign produces the results hoped for and expected, it will be necessary for surgeons to provide themselves with all available methods of diagnosis of these lesions in their earliest stage.

In relation to breast tumors this means a surgical exploration of most breast tumors as soon as discovered. Diagnosis must then be made immediately. It can be done by frozen section examination by a pathologist or an examination of the gross characteristics of tumor by surgeon. Both methods are of service and should be used.

If any benefit is to be derived from public education in matter of breast tumors, the present waiting policy for clinical signs of malignancy must be abandoned.

"Cancer En Cuirasse," by Dr. S. E. Earp.

This patient represents a condition of metastasis as shown by large lymph-nodes together with edema of arm appearing before any clinical evidence of a breast tumor. Patient, female, aged 46 years, by occupation a bookkeeper. Left arm from shoulder to wrist was large and edematous on July 21, 1913. An opinion concerning possibility of malignancy was given, although a careful examination of axillae, breasts and inguinal regions gave no evidence of glandular enlargement. Since patient stated that edematous arm had been so for several months and decreased somewhat at times and then increased again, a further examination was asked for a week later. However no attention was paid to this by the patient until two months and six days later at which time the cervical, axillary and mammary glands on the left side were present and arm was larger. The evidence indicates a carcinomatous metastasis with probably a carcinomatous origin in left mammary gland. A consultation of physicians brought conclusion that surgical interference was inadvisable and two and a half months later skin over pectoral region was filled with shot-like nodules and whole surface was hard, tense and inelastic, not unlike what is seen in scleroderma. Progress was rapid. A month later right side of face was swollen and breath sounds of left lung were obscured. Over right lung could be heard mucous râles. Heart sounds were heard to right of the median line accompanied with a mitral insufficiency, obstructed dyspnea with a whistling sound, cough and hoarseness

were prominent. Left breast was hard and of egg-plant hue, with vesicles around nipple, which were followed by superficial destruction of tissue. Left arm was not edematous, but its surface was hard and tense as if encased in leather and was of dark blue in color. Patient died about eight months after first seen, which possibly may have been a year after onset of disease.

Dr. A. M. Hetherington presented a paper on "Public Education on the Cancer Question."

This is one of the most vital questions in the medical world. Statistics show that cancer is increasing very rapidly. Patient must be taught to seek surgical aid early. A large majority of cancer sufferers are curable if operated early. The Cancer Campaign Committee, with Dr. T. S. Cullen of Baltimore as chairman, is doing a great work in getting a general campaign started. They are doing this by having articles for laymen published in the daily newspapers and magazines.

Cancer problem is a complex one. One that cannot be handled as tuberculosis, typhoid or syphilis. These have a definite cause and are of great danger to others. On the other hand cancer is not dangerous (so far as we know) and the cause is to be found. Educate people to save themselves, by lectures in clubs and factories and by appropriate articles published in local daily newspapers and magazines. People immediately seek surgical aid for appendicitis. This is brought about by public education. The same is true of small-pox and of typhoid vaccination.

Dr. J. V. Reed read a paper on "Chronic Cystic Mastitis," with case reports.

Cases were reported of chronic cystic mastitis. These cases were told of possibility of condition becoming malignant, and were advised to have breasts carefully watched for signs of malignancy. Two of these cases have been under observation for over three years and have remained free from dangerous signs. My advice to these patients may seem very old fashioned in light of our present knowledge. We know that cystic mastitis is prone to become malignant. Still we do not know that they all become malignant more frequently than the non-cystic breast. Again, few of these patients will sacrifice one or both breasts on possibility of malignancy. They will ask you if it is cancer or not. If you say that you do not know, they will go to some one who does know, or at least says he does. Again if you say it is not cancer, but may become malignant later, and insist upon an operation, the chances are that she will find some one who will treat it medically, and the possibility is that this person will not be able to watch condition intelligently. In other words to advise radical treatment for a future possible condition, may make patient lose confidence, while conservative treatment, with a full statement of facts, tends to gain confidence and to keep patient under intelligent supervision.

On the other hand if chronic cystic mastitis is associated with a tumor, a large rapidly growing cyst; or if there is evidence of induration, shortening of trabeculae, or if the small cysts are held together, it will be impossible to differentiate it from cancer, and a radical operation should be immediately advised.

DISCUSSION

Dr. Link: Breast tumor cases reach the surgeon in Indiana late, making the percentage of cures low. We should operate before the appearance of gross signs of malignancy, when possible. The place to make a

diagnosis of a doubtful breast tumor is in the operating room. A case was reported in which diagnosis was made by a skilled pathologist who had installed a freezing microtome, microscope and appurtenances in the operating room of the Deaconess Hospital for the occasion.

Dr. Gatch: Essayist draws attention to importance of creating clinical history, statistical study, physical examination and microscopic picture in our study of cancer of breast. And, furthermore, that by this creation in a great majority of cases we can reach a correct diagnosis, even in early stages. Two things are of the utmost importance—how old is patient, and how long has she had tumor?

Diagnosis of cancer in its earliest stages is much facilitated by a test which was first learned from Professor Halstead. Breast is attached to skin by certain bands or connective tissue called the "ligaments of Cooper." As a cancer of breast grows it causes a shortening of all connective tissue. Seize breast in two hands and then gently make it describe the greatest possible excursions in all directions on breast; looking at skin, if at any point on breast you see a tugging in, a pitting of the skin, you may be sure lesion is cancer.

There are two other things, tuberculosis and chronic mastitis, from which to differentiate. A word as to chronic mastitis. Many eminent pathologists do not believe that lesions tend to undergo a malignant change. Every lesion is malignant from the start. We think that lesions which are benign at first may become malignant, but that has never been scientifically demonstrated in same sense that we know tubercle bacillus is cause of tuberculosis. Chronic cystic mastitis occurs in breast under two forms; in young women, in which it may assume different forms, and in women along about menopause. Latter condition, by all odds, more common of the two.

The case of Dr. Earp, en cuirasse, might be termed a cryptic cancer, the cancer of which we do not know origin. It was at one time thought to be due to a bony infiltration of skin with cancer. We know now that it is due to a lymphatic stasis and an overgrowth of connective tissue. Pathology, fundamentally, is same as that of tropical elephantiasis.

Dr. Shimer: In McCarty's recent article he takes up chronic mastitis, the mastitis in which change is chiefly found in acini of glands. He says that these changes in chronic mastitis very closely resembled those found in beginning carcinoma and that in cases of carcinoma of breast he also finds these cysts due to chronic mastitis. Kaughman, Osholf and Zeigler say that picture in chronic mastitis, lobular mastitis and beginning carcinoma resembled each other very closely. Dixon, the English author, says that they resemble each other very closely, but he does not believe that carcinoma ever originates from chronic mastitis. Origin of these carcinomas is certainly a very perplexing question.

Bloodgood says that no surgeon should undertake an operation in which he could not confirm diagnosis immediately as to whether tumor is malignant or not and to decide just what sort of an operation shall be done. He says that in no case have they ever found a tumor malignant when it has been decided that it was benign by pathologist and surgeon.

Dr. Wynn: I want to direct the few remarks that I make toward question of skin cancer. The dominant phase of it advanced for years, of course, is

atrophy. There is no organ that shows more pronounced atrophic changes than the skin, which comes on over a period of months or years and by these developing areas of pigmentation, warty-like in character, take on a physical character that we designate in the text-books as "senile warts." These "senile warts" are notably upon face and about nose. Those are not cancer at all. The point I want to emphasize is that that sort of condition does underlie in a large majority of cases development of epithelioma, and particularly of exposed parts in old men and in old women. Now practically what is the thing of importance to us as practitioners? It is to recognize that this is a precancerous condition and that we can by proper medication in these cases in old men and old women get rid of that condition of the skin. You can relieve such a condition. You can do it in the first place by application to these scaly, warty-like, excrescences on the skin, of some such remedy as salicylic acid. We must disagree, perhaps, as to whether knife or x-ray is the best thing, or even caustics; but in prevention of development of these conditions I maintain that we can do everything.

Dr. Rilus Eastman: Concerning immediate laboratory diagnosis of breast neoplasms, I recall one brilliant example which came up in Gerson's clinic in which a small growth was removed from uterus; with freezing microtome, after plan of Ludwig Pick, a selectively stained preparation was made within twelve minutes and diagnosis of carcinoma lignum returned and radical operation was made. The pathologist who examines any piece of tissue submitted to him by the surgeon can only answer for what he sees upon his slide. There is such a thing as adenoma carcinoma in which, in a perfectly benign neoplasm of adenoma type there may be a small focus showing schirrhous type of carcinoma. No pathologist in fifteen minutes could section a whole breast or a whole neoplasm and discover definitely whether there was present the condition of adenoma carcinomatosis. Any man who waits for so-called signs of carcinoma of breast, waits for signs of inoperability of carcinoma, but given age of carcinoma, fourth or fifth or sixth decades of life, given an individual who shows any indication of dyscrasia whatever, whether there be present any local signs of carcinoma or not, if there be present a neoplasm I think a man is acting according to most modern and the best precepts and is doing the best surgery who errs on the side of radicalism, if he errs at all in such a case. I think it is a pernicious practice to incise a growth, which is in any way suspicious; and for the extension of our carcinomatous process to open up lymphatics by use of a knife in a neoplasm of doubtful character is not good surgery.

Dr. Kennedy: I want to speak particularly in regard to Dr. Hetherington's paper in regard to the education of the public about cancer. This matter should be taken up in an educational way with physicians, with nurses and to the public through medium of magazines and newspapers; teaching them about pathology of cancer, about dangers of delay and those matters. Going for a minute to subject of cancer of uterus. Women usually believe, and a great many physicians apparently, also, that an increased flow about time of change is a normal condition. I would suggest that they be taught with persistence that that is not true, that no flow accompanying menopause is a normal condition. I think that rather than teach these women

pathology of cancer, far greater benefits would be reaped if we would teach them physiology of menstruation. If they were taught more about normal menstruation some specific results might be taken early enough to insure a cure by operation.

Dr. Pantzer: Generally speaking, the diagnosis, probably, of cancer can be made with such a degree of certainty that we have rules by which to go and I for one, would not like to see indiscriminate removal of breasts on mere presentation of tumor. I think we have every reason at this stage to think that we should equip ourselves, as physicians, better and that we will find improvement and confidence of our patients in greater degree by a policy that will not simply slaughter breasts on appearance of tumor. Our condition of science at this time is such that we cannot definitely say in every instance that a case is cancer or is not cancer; but that here we have the probability and on such probability I have been advised to operate. I would simply advise a policy of not operating in every case, at least operating radically in every case of mammary tumor, but differentiating. When in doubt call in your friends, your fellows in surgery or pathologists, and then do what seems best under circumstances.

Dr. Martin: We get our cancer cases earlier than we got them a number of years ago. They don't come to us in advanced stages of cancer; mutilating operations are not necessary any more. Danger of incising into a supposed cancer; you get a very small piece of tissue, that piece of tissue, however, in another area in the breast; we may have very positive signs of disease. We have no way to determine when a tumor is still inside breast, whether there is any gradation; shall we not give patient benefit of removing this before it becomes a cancer? That is, to treat this cancer before it is a cancer and remove this tumor before it is a cancer, than to wait or procrastinate possibly with a fatal issue.

Dr. Bonn: Called attention to frequency of involved chain of glands; had a recurrence to glands around umbilicus. Spoke of particularly interesting form of work by Professor Fisher of Rome regarding what he calls oncogenic and oncolytic organs of body. For instance, the oncogenic; the spleen is removed in a patient; and a malignant growth is found. The oncolytic property of growth is oncolytic property of testis or ovary as regards decrease in extent of growth. How long can a cancer en cuirasse last before the fatal termination sets in?

Dr. Padgett: Just a word in regard to Dr. Hetherington's paper and directly in connection with this campaign of education in regard to cancer. I am always interested to know how the public is going to take these things and how much is going to come of it. I think that perhaps not all education is needed on the part of laymen. I think if we were half as badly scared and as uneasy about cancers as these patients are we would have less trouble.

Dr. Pantzer: The simple removal of breasts is an awful thing to female.

Dr. Payne: We should have a cancer school for learning cancer diagnosis. It is time for us to know what we are talking about. Everyone has confessed ignorance on the subject.

Dr. Jackson: Just briefly to one point, and that is the question of whether tumor is always of one or the other type, malignant or benign. I don't believe any

man can say that it is true that a tumor is either always benign or always malignant. I was impressed by an article in one of the journals just last week, of an extensive study of the question of metamorphosis of carcinoma from fibroids of uterus showing serial sections and showing, to my mind, and evidently to the investigator's, very plainly a carcinomatous metamorphosis in cells of fibroid of uterus. The pictures lead us to believe that this matter is still an open question.

Dr. Reed, closing: The only thing I can say in defense is that it is rather unsafe to believe newspaper diagnosis.

Dr. Hadley (closing discussion): I wanted to call attention to the fact that twenty years ago when Halstead first began to make radical operations for carcinoma, mortality was practically 100 per cent., but during that twenty years statistics have been collected to show that even the most radical procedure in fully developed carcinoma will not cure cancer. The medical profession has been thrown back absolutely on the proposition of getting these cases earlier, it means that surgeons are going to have to educate themselves some way or other by the use of frozen section method, or by a careful study of gross characteristics. There will be a certain percentage of cases in which it will always be an element of doubt, but you had better err on the side of radicalism in that type of case without a doubt. Otherwise the situation is going to be exactly as it has always been.

Dr. Hadley showed slides to demonstrate malignant change. Meeting adjourned.

ALFRED HENRY, M.D., Secretary.,

Meeting of January 27

Meeting called to order by President Dr. T. B. Eastman; attendance 65. Applications of Drs. C. D. Holmes and G. W. Holmes read for first time and posted for thirty days. Applications of Dr. J. W. Duckworth read second time and referred to council.

Dr. Howard Raper of Indiana Dental College gave an illustrated lecture on "Oral Sepsis and Radiography as Related Thereto."

Dr. Raper took up question of oral sepsis as related to constitutional diseases reviewing literature of noted men at home and abroad. In course of lecture radiograms were displayed by stereopticon showing proper methods of taking care of faulty teeth, abscesses, impacted teeth, pyorrhea alveolaris, and many other things pertaining to dental surgery. The lecturer stated that his purpose was primarily to inspire medical profession to realize importance of clean and good dentistry that patients may be directed to capable dentists which would in time eliminate quacks.

DISCUSSION

Dr. Henshaw: Radiography is indispensable in dentistry to-day. Oral sepsis is not a fad, is not over-rated. Ingested pus from oral cavity cannot but be harmful. It is easy to slight or overlook canal work; this is where the *quack* gets in his work. Appeal was made to physicians to help these patients.

Dr. Page: The work of eighteen years in and around the mouth has convinced me there are dangers arising from oral sepsis. There is a close relation to tonsil infection. The teeth and tonsils may be infected from each other. There is no question that many diseases arise from oral sepsis. Gastritis, enteritis, colitis, nephritis, tonsillitis, bronchitis, otitis, meningitis and

neuritis are some illustrations. A stream of pus must cause trouble. We are learning to find many diseases through the study of oral sepsis overlooked heretofore.

Dr. Lucas: Medicine and dentistry are getting closer together each year. Dr. Hunter's observations covered work done abroad, but does not truly apply to dentistry in middle west America. Oral sepsis belongs to medicine as well as to dentistry, because it affects whole body. Preparation is secret in aseptic dentistry; eight hours may be required to properly prepare a cavity; it could be done in thirty minutes. The field of quackery is here seen. Honest dentistry must be charged for on time basis. Patients are too often advised to let teeth alone if there be no pain. Dentists now know how to treat pyorrhea. X-ray must be used to diagnose impacted teeth. Our societies should get together more often. Our cause is one in common.

Dr. Dodds: When I see a case of endocarditis or myocarditis a septic mouth is first suspected, or if an aged male, an enlarged prostate. In treating tuberculosis I endeavor first to see that mouth is clean and nose clear. Mouth is dirtiest cavity in body. Tonsillitis, nephritis and anemia have been proven to originate in a septic mouth.

Dr. Wynn: We should be gratified to know there are such dentists in our city. Pyorrhea alveolaris looked upon as incurable is wrong. X-ray plates prove what can be done; these fine examples of x-ray work seem impossible. Swallowing organisms must infect, yet the stomach fluid is said to destroy most organisms from mouth. However, some do get by and infect beyond. Lymph channels are mostly cause of general dissemination. Our poor are not getting the attention they deserve in oral preservation. Our hospitals and dispensaries should be equipped for it. Dr. Raper's work is of a high order and is to be commended.

Dr. Bush: The one thing that is lacking in our school inspection is inspection of children's teeth. Many defects are seen in a large per cent. of school children's teeth. Adequate dental inspection would do much good and should be instituted.

Dr. Raper, closing: Contrary to statement of Dr. Lucas I will say there is much inferior work done in Indianapolis. Quacks do cheap work cheaply. Good work requires time. Many competent young men go out equipped for doing high-class work; people want cheaper work done and find quacks or inferior dentists to do it. Consequently these young men fail or become quacks. In the name of humanity will you as physicians not help remedy this very serious evil?

Meeting of February 3

Meeting called to order by President T. B. Eastman with fifty members present. Minutes of previous meeting read and approved. Dr. J. W. Duckworth was elected to membership. Dr. Hurt of Waynetown was a visitor.

Dr. H. A. Jacobs reported an apparent swindle in which a man announcing himself as representing the A. M. A. tried to collect dues for that organization.

PROGRAM

Dr. J. R. Newcomb read a paper on "A Few Ocular Don'ts for the General Practitioner." A summary follows:

Foreign Bodies in the Cornea: A minor injury which requires simple precaution to prevent it becoming a more serious condition. Faulty technic of

removal of foreign bodies and careless after treatment frequently result disastrously. A simple method of removal and treatment which eliminated the danger of complication. Localizing the injury; how to determine whether injury is perforating or superficial. Importance of measurement of visual acuity. How to determine whether or not a corneal injury is serious.

Headache: Recognition of frequent existence of atypical eye strain headaches; because your patient is wearing lenses do not assume that those lenses are correct. Measurement of visual acuity of value. Therapeutic test which can be applied. Case reports illustrating unusual eye strain symptoms. Do not underestimate importance of normal visual functions and necessity of proper corrections of existing errors. Do not tell patients that children will out-grow ocular trouble. Headache in children; crossed eyes in children; errors of refraction; value of early correction and inadvisability of corrections made too early in life.

Dr. H. R. Allen read a paper on "Advancement in Treatment of Congenital Dislocation of Hip Joint."

Bloodless reduction of congenital dislocation is occasionally impossible on account of constricted capsular ligament. Many of these cases become possible if constriction is bloodlessly stretched for a few weeks. Redislocation may be prevented by a new retention brace equipped with a padded trochanteric pressure band so installed that every strain exerted on the splint is transformed into direct pressure of the femoral head into shallow acetabulum. This new appliance also has adjustable legs and a successful record even in double dislocation.

DISCUSSION

Dr. J. W. Sluss: Apparatus shown by Dr. Allen is constructed and applied on sound principles. There is much to learn yet in such cases. The cause is unknown in most cases, seems to be an attempt on the part of nature to introduce a new mode of locomotion. Eighty-eight per cent. are females. Then means may be employed to reduce these cases, viz: Manipulative, mechanical and operative. Dr. Allen's manipulative method is not applicable to all cases. When capsule is shortened operative procedure is used. Mechanical treatment is brought about by machinery made for the purpose.

Dr. Lindenmuth: Recognition, reduction and retention are the essentials. Often diagnosed as a form of paralysis. Radiograph shows a very shallow acetabulum due to non-development. Head is not deformed simply not developed. Pelvis tilts forward and often shows lordosis.

Dr. Heath: "Don't" is bad philosophy. "Thou shalt" is better. Argyrol is not irritating. "I think" or "I don't think," does not hold. We must know if there is a foreign body in the eye. Use x-ray if necessary. Eye strain is a common cause of headache. Beware of opticians. They are one of three classes, viz: peddlers, merchants or manufacturers. Lead should never be used in the eye. Permanent opacity may result. Sulphate of copper should rarely be used, and silver nitrate seldom. Cocaine sparingly. Eserin may cause adhesions. A practitioner should ask himself, "Am I prepared to treat this case?"

Dr. Sharp: A case was cited where a cinder in eye was diagnosed as rheumatism. Oculists do not know enough general medicine. The general practitioner

should not attempt an eye operation unless he feels absolutely capable. Oculists and general practitioners should work together.

Dr. Payne: As a general practitioner I remove foreign bodies to prevent my neighbor who knows less than I do.

Dr. Taylor: The general practitioner is not prepared at any time to care for an eye except to remove dust particles. He does not know how much heat and cold to apply. One "don't." Don't hesitate more than a minute to seek an oculist.

Dr. Allen, closing: The younger the patient the better. Easy to get normal; easy to keep normal.

Dr. Newcomb, closing: Argyrol is irritating. Silver nitrate is my favorite antiseptic solution. General practitioners should have more respect for the oculist.

Meeting adjourned.

ALFRED HENRY, Secretary.

Meeting of February 10

Meeting called to order by the president, Dr. T. B. Eastman. Minutes read and approved. Application of J. G. Scifres read for the second time and referred to council. Number present, fifty-five.

Dr. Kitchen reported on quarters and furnishings.

Motion by Dr. W. B. Kitchen to change the location of meeting place to the Washington Hotel carried unanimously. After reconsidering the motion it was carried unanimously.

Program: Paper, "Bacteriology of Rheumatism," by Dr. L. W. Barry.

1. Streptococci of low virulence are frequently found in joint fluid and in blood of persons suffering with acute articular rheumatism. These streptococci when injected into animals produce a disease similar to that in man.

2. Streptococci similar to those found in the joints and blood in acute articular rheumatism are also found in the muscles in cases of acute rheumatic myositis.

3. Various types of rheumatic streptococci can be changed one into another and also into pneumococci.

4. Chronic arthritis of a deformans type sometimes may be due to a hemolytic streptococcus found in the tonsillar crypts of patients suffering with this disease.

CASE REPORT

Erysipelas: Serum Treatment, by Dr. Charles McNaull. Patient, a woman aged 72. Disease developed in the face following an infection of the eye, lasted eighteen days and covered the entire body excepting lower extremities. After four days of continued high temperature and marked toxemia, began using serum. First day gave 20 c.c.; 10 c.c. a. m. and 10 c.c. p. m. Next a. m. temperature was improved, but became worse by evening, then gave 10 c.c. and repeated the next morning. Conditions improved. Two days following gave 20 c.c. each, and for nine days continued with 10 c.c. each day. During this time there was little medication but usual local applications. It seemed very evident that the serum controlled the toxemia during the course of the disease, which after eighteen days subsided.

DISCUSSION

Dr. McDonald: "Arthritis" has become loosely used as "rheumatism." Arthritis deformans has little to help. Bronchitis is closely associated with acute

arthritis, although seldom considered. Fever present shows arthritis is infectious. Organism difficult to demonstrate.

Dr. Alburger: Paper gave a good review of literature. Rheumatism is infectious in all its forms. Tonsils source of frequent infection. Also pyorrhea alveolaris. A dram to an ounce of pus swallowed daily must cause bodily infection. Autogenous vaccine very difficult to get. Chronic cases more amenable to treatment.

Dr. Jackson: Cited cases of endocarditis in children. Pure culture *S. aureus* from blood cultures predominated. Another case of vulva abscess in a child terminating in erysipelas involving entire lower part of body. Serum treatment showed considerable improvement. No applications helped a third case except vaselin.

Dr. A. W. Brayton: White precipitate ointments have no deleterious effects especially no mercurial poisoning. I know of but one death from erysipelas.

Dr. Lindenmuth: Erysipelas is self limiting and recovers with practically no treatment.

Dr. Payne: Erysipelas is deceptive. Cited a case which died. Stated he had seen many cases die.

Dr. McNaul, closing: I know of three cases having died. Have never used serum in facial cases.

Meeting adjourned. ALFRED HENRY, Secretary.

Meeting of February 17

Meeting at the Washington Hotel called to order by the president. Minutes read and approved. Applications of Drs. P. H. Weeks and F. A. Brayton were read and ordered posted for thirty days. Applications of Drs. A. S. Neely, C. B. Gutelius, C. S. Auble and Robert Dwyer were read for the second time and referred to the Council. Dr. J. G. Scifres was elected to membership. Ninety-five present.

PROGRAM

Dr. E. I. McKesson of Toledo, O., read a paper on "Some Observations in Blood Pressure During Operation."

Dr. J. W. Ricketts reported a case of hydatid cyst showing specimen. Dr. Ricketts reviewed literature on the subject.

Dr. J. H. Taylor reported a case of "Acute Nephritis Treated with Horse Serum for Hemorrhage."

The following points were emphasized:

1. Necessity of making an early diagnosis.
2. Importance of rest and a restricted diet in its management.
3. Helpfulness of frequent examinations of urine as a guide in its treatment.
4. Importance of keeping in closer touch with patient as a means of preventing relapse or recurrence of disease.

5. Value of horse serum (which relieved hemorrhage from kidneys in this case) in controlling internal hemorrhages.

Dr. Paul Coble showed (a) temporal bone sectioned, (b) luetic sequestrum.

Abstract: 1. Anatomical specimen, perpendicular section of raw temporal bone cut with jeweler's saw. The cells of the mastoid process about equally exposed. blade of saw entered middle ear cutting through the incudostapedial joint, leaving these bones in place and uninjured, then out the osseous Eustachian tube.

Demonstrated points of interest seen in this anatomical relation.

2. Two metal casts of the temporal bone showing relations of mastoid, middle and internal ear. These casts furnish an excellent means for the study of the anatomical parts they represent.

3. Two sequestrums of the nasal septum removed from cases of tertiary syphilis were shown.

DISCUSSION

Dr. Clark: Chief factor in mortality and morbidity is shock. It is hard to define. Probably change in protoplasm of cell. Trauma and tearing material produce shock chiefly. We can lessen both. Fear also is a causative factor. Chloroform causes most depressing condition, ether next and nitrous oxide least. Dr. Crile does no tearing, but sharp dissection. Blood-pressure taken before and after operations will be a routine in all surgeries soon.

Dr. Ross: Dr. McKesson has emphasized in our society the importance of the anesthetist. I am willing to be criticised by him. In the last century we have had two epochs in surgery—the anesthetic and asepsis. It lies in everyone's realm to leave his work better than he found it.

Dr. Kimberlin: A surgeon should be familiar with the pressure of the blood and general circulatory condition. Many operated patients have lost resistance never to regain it. Blood-pressure has to do with the various organs—not just the arteries and veins. This essay tells us we have means to determine our surgical risk. On the surgeon's table we can learn much that can help one to help the patient's immediate future.

Dr. McKesson's observations are scientific and help a great deal, but I believe an all round condition is overlooked which is of more practical value than mere blood-pressure.

Dr. Kemper: I have practiced medicine fifty years. Have seen one case of hydatid cysts in fourteen hundred.

Dr. McKesson, closing: I consider taking blood-pressure more important than auscultation and percussion. At the last minute before operation is no time for making a general examination.

Meeting adjourned. ALFRED HENRY, Secretary.

Meeting of February 24

Meeting at the Washington Hotel called to order by the president. Minutes read and approved.

Drs. A. S. Neely, C. B. Gutelius, C. S. Auble and Robert Dwyer were elected to membership. Attendance, fifty.

PROGRAM

Dr. T. C. Kennedy read a paper on "The Cancer Question." He said in part: Cancer, from the remotest antiquity to the present time, has been clouded by superstition. The only way to make headway against it is by a campaign of publicity such as has been made in the fight against tuberculosis. To obtain early diagnosis both laity and profession must work together. County and state societies must devote much time to the problem as Pennsylvania already has. Physicians cannot always persuade patients to come early therefore something must be done to relieve a certain percentage of late cases which must always exist. Cancer is not contagious and seems to be a

disease of the well to do. Cancer types are many and varied and killed 75,000 people in 1911. In seventeen states the death rate from cancer has risen 104 per cent. since 1880. The average age of death from cancer is fifty-nine years. Increase in death rate is not apparent but true. Increased death rate is due to an increased debility caused by our changed manner of life. An intelligent review of the theories as to what causes cancer makes interesting reading and they are all very plausible, but none as yet are to be accepted as absolute on account of insufficient proof. Cancer is an elastic word and from popular usage is now applied to all malignant tumors. Physicians should adhere more to the scientific nomenclature as it gives a better understanding of the conditions which exist. Ninety-five per cent. of deaths from cancer occur after 35 years. Eighty-six per cent. after 45 years. The death rate from this disease is greater in America and Europe than all the rest of the world. Of individual countries Switzerland is the one where cancer is most prevalent.

Treatment: We must give to each new treatment careful and cautious study. Surgery can become no more radical so we must find some auxiliary agents. Ehrlich is working on chemo-therapy as a curative agency. Selenium has given some good results. Radium also has given good results but is as yet in the experimental stage. In a few years it will have assumed its proper place and will be of great value as a palliative agent if not as a curative one.

DISCUSSION

Dr. Martin: Surgery still remains the only means of reducing mortality. There should not be seventy-five thousand deaths in a year. Many of these could have been saved. Early diagnosis is the key note. Precancerous condition must be attacked. Four per cent. of cholelithiasis leads to cancer of gall-bladder. Seventy-five per cent. of gall-bladder cancer caused by gall-stones. Many uterine symptoms cared for may prevent cancer later. Classification of tumors benign and malignant misleads physicians. Waiting for benign tumor results disastrously. There are no definite conclusions regarding radium and selenium.

Dr. Bernays Kennedy: Cancer can be cured by early surgery. No one disputes that. Women should be taught to observe and to suspect any unnatural uterine hemorrhage. Normal and abnormal menstruations should be recognized by women. There must be more general information spread—then more individual.

Dr. La Penta: The microscope should be used more. We all need more experience in order to early diagnose. Surgery is one cure.

Dr. Rilus Eastman: Society should go on record. Some message should go out to the public press as a means to further education of the people. By so doing society will have fulfilled a real purpose.

Dr. Kennedy, closing: Trauma does not produce cancer so generally as is suspected. It is difficult to teach a woman how to recognize a cancer early when she already has an operable carcinoma. Requires several years to know when a cancer is cured. Reported two cases of epithelioma treated and cured by two applications of radium.

Dr. Brayton made a motion that the chair appoint a committee of five to take up the public education phase and publish suitable articles in newspapers. Carried.

Meeting adjourned. ALFRED HENRY, Secretary.

DELAWARE COUNTY

Regular meeting of the Delaware County Medical Society was held Friday, February 6, in the lecture room of the Muncie public library with President D. M. Green, M.D., in the chair. A large audience was assembled, several physicians from adjoining counties being present to hear Prof. Daniel N. Eisendrath, A.M., M.D., of Chicago, who was to speak on "The Diagnosis of Surgical Diseases of the Kidney."

Before Dr. Eisendrath's address, Dr. Geo. R. Green with a few well chosen remarks presented the society with a portrait of Dr. H. C. Winans, father of our recently deceased member, Dr. H. M. Winans. Our president in behalf of the society accepted the gift, and the library custodian was requested to hang the portrait on the wall of the assembly room.

Dr. Eisendrath's lecture was illustrated by a splendid collection of stereopticon views clearly portraying the anatomy, pathology and surgery of the kidney and genito-urinary tract. The day was one of the most profitable in the history of the society.

The speaker began with the origin of real kidney surgery, some thirty years ago, tracing its progress step by step up to the present time. The marked improvement in Roentgenography because of perfected apparatus and the injection of silver salts is rapidly doing away with errors formerly due to shadow mistakes, and correct diagnosis is now possible in the vast majority of mild or grave kidney lesions. The modern cystoscope has revolutionized our ideas on the etiology and pathology of bladder affections. One of the fundamental essentials is that the surgeon must determine the functional capacity of the remaining kidney before he attempts to remove the other. Generally speaking, kidney pathology is divided into four groups: infections, tumors, calculus and tuberculosis. Tuberculosis of the bladder is practically never primary. It is due to descending infection.

An operator who attempts to do kidney surgery ought to interpret his own pictures and use his own cystoscope. He has no more right to depend on another for his cystoscopic diagnosis than he would for the findings of the stethoscope in a heart or lung case. Modern diagnostic methods are proving the many vague varieties of low grade septic conditions never definitely located or classified to be microbic infections of the urinary tract.

Dr. Eisendrath exhibited temperature charts and case records of patients of various ages and conditions showing the marked improvement following nephrectomy or other indicated kidney surgery.

Owing to the lateness of the hour, the discussion was limited to the answering of a few pertinent questions. Adjourned. H. D. FAIR, Secretary.

ELKHART COUNTY MEDICAL ASSOCIATION

Meeting of Feb. 5, 1914, called to order at 8 p. m. by President Ash. Minutes of January meeting read and approved. Dr. E. M. Hoover reported the Burton D. Myer's lecture on eugenics to be delivered February 27 in the First Presbyterian Church, Elkhart. Treasurer reported a balance of \$73.81.

Paper, "Varicose Uleers," by Dr. W. B. Siders, Milledburg. Destructive changes in tissue: (1) atrophy, a change in size; (2) degeneration, a change in structure; (3) necrosis, a mass destruction showing change both in size and structure. Ulcer is a gradual mole-

cular process, necrosis with erosion. Varix is a dilated, elongated, tortuous condition of a vein due either to an impeded circulation in the vein or too much blood. Varicose ulcer results from the thinning and eventually breaking through of the wall of the varix at one or more points.

Dr. Siders discussed in detail the etiology, pathology, symptoms, differential diagnosis and prognosis. He enumerated the various methods of treating varicose ulcers and gave them credit for curing ordinary cases. In those cases which remain intractable over long periods he uses the following with eminent success: Put patient to bed for twenty-four hours with leg elevated. Clean ulcer with water H_2O_2 . Cut gauze just the proper size to fit into ulcer and add layer after layer till ulcer is just filled. Dust with zinc stearate. Wrap leg with cotton from ankle to knee and cover with dressing of bandaging painted layer by layer with a paste made of gelatin, zinc oxid and cold water. This forms a hard cast which is left on till exudation stains through. Then cut window in cast slightly larger than ulcer. Reach in and draw out the soiled gauze and replace with fresh sterile gauze. Cut off cast when it loosens and replace. After healing apply cast of same materials and leave on for several months.

"Burns and Their Treatment" was presented in a paper by Dr. J. A. Snapp of Goshen. He discussed the local and constitutional effects of burns by dry heat, moist heat, corrosives and x-rays. Destruction of body tissue is followed by formation of and absorption of toxins. This toxemia causes acute nephritis with suppression of urine, and acute gastro-enteritis. Carbolic and sulphuric are the two acids causing most burns. X-ray burns are of such great importance because they destroy the more highly differentiated structures in the skin: hair follicles, glands, blood-vessels and nerves. Healing is tedious if it occurs at all.

Treatment: For simple burns an antiseptic bland emollient, gauze and cotton. As opposed to other surgeons, Dr. Snapp believes in the closed treatment of burns with the exclusion of air. He emphasized the great importance of keeping the wounds absolutely clean.

Report of Case 1.—Male, 30, fell into vat of boiling water. Dr. Snapp saw him ten minutes after he was pulled out. Taken to hospital, clothes removed. Burns involved entire right side, left leg below the knee, neck, chest and abdomen. Looked moribund. Morphine hypodermically. Burns treated with vaselin and campho-phenique and loose bandaging. Delirium, almost complete suppression of urine, deep sloughing, but he recovered without loss of function and no permanent contractures.

Case 2.—Woman with frightful burns of mouth and throat. Saw her one hour after taking carbolic acid. No radial pulse, cyanosis. Poured muriate of ammonia, two drams to a teacupful of water, down her throat and followed with milk and raw eggs. Recovery.

DISCUSSION

Dr. C. W. Frink, Elkhart: Decried ambulatory treatment of varicose ulcer. Rest in bed is more rational.

Dr. J. C. Fleming, Elkhart: Commended Dr. Siders' medical treatment for varicose ulcers. Advised addition of glycerin to gelatin, water and zinc oxid. Ulcers surrounded by dense cicatrix may be cut around in stellate manner to favor granulations. Best treatment for burns is open air treatment, prevention of infection and enough morphine to control pain.

Dr. C. W. Haywood, Elkhart: Concerning x-ray burns, best treatment is absolute prevention. Roentgen-rays which pass through tissues do not burn. Burns result when rays come to rest in tissues. Soft tube and long exposure cause burns. Use hard tube in raying abdominal tumors and apparatus to absorb soft rays.

Dr. G. W. Spohn, Elkhart: With modern apparatus and methods x-ray burns are inexcusable. Treated eczema, sarcoma and carcinoma in past with splendid success. Watch idiosyncrasies of patient in application of x-rays. In treating simple burns, dry quickly the exuding serum and get a protective crust in open treatment. If burn is on cornea, acetate of lead is dangerous. Neutralize with sodium bicarbonate. Acetate of lead on conjunctiva is soothing and good treatment. Keep lead wire or lead plate between conjunctival surfaces.

Dr. B. F. Kuhn, Elkhart: Recommended the alcohol treatment for burns of first and second degree.

Moved and carried that voting on application of Dr. S. A. Edmands for membership be postponed two months.

Adjourned. JAMES A. WORK, JR., M.D., Secretary.

GRANT COUNTY

The Grant County Medical Society met in regular session in the Marion public library with Dr. A. A. Hamilton in the chair.

Minutes of January meeting read and approved.

Dr. C. J. Overman read the paper of the evening on "The Practical Benefit of Bacterins." He reported his own experiences with bacterins in treating tonsillitis, erysipelas, bronchial asthma, typhoid fever and pneumonia. He claims that 85 per cent. of all cases in which he has used bacterins have been materially helped and progress of disease stayed. Only disease in which he has essentially failed was acne.

Discussion brought out that not all the members had been as fortunate in their results as had Dr. Overman. They invariably carried on regular treatment even when using bacterins. Majority thought the bacterin treatment was as yet largely experimental and that one should not lean too heavily on it to the exclusion of other remedial agents.

The March meeting will be our first quarterly or rally meeting of the year. At these meetings an address is given by some one outside of the district and all pull for a large attendance. It is the consensus of opinion of the members of the society that a new face and a new voice occasionally stimulate renewed interest and zeal in the work.

Adjourned. J. E. JOHNSON, Secretary.

LAKE COUNTY

Regular meeting of Lake County Medical Society was held at Gary Commercial Club, February 12 at 7 p. m., Dr. Iddings presiding. Attendance 33.

Minutes of January meeting read and approved.

Applications for membership received from Drs. C. C. Lawrence and A. H. Andrews, both of Gary. Board of Censors having reported favorably on these applications, they were duly elected.

Evening was devoted to a symposium on "Winter Affections of Children." Dr. Boardman, "The Toilet of Nose and Throat in Acute Infections"; Dr. Oberlin, "The Exanthemata"; Dr. Brink, "The Pneumonias"; Dr. Jos. Brennemann of Chicago, "Feeding the Sick Child."

Adjourned. E. M. SHANKLIN, Secretary.

PUTNAM COUNTY

Regular meeting of Putnam County Medical Society was held February 10 at Greencastle with a large attendance. The following program of ten-minute papers was carried out: "The Test for and Vaccination Against Typhoid Fever," by Dr. King, discussed by Dr. Hawkins; "Tests for Tuberculosis," Dr. Sundranski, discussed by Drs. Zaring and Collins; "Two Glass Test for Specific Urethritis," Dr. Amick, discussed by Dr. Preston; "Blood Test in Feces and Vomit," Dr. McGaughey, discussed by Dr. Tucker.

Dr. C. N. Combs, state secretary, and Dr. Weinstein, councilor of Fifth district, were guests and gave interesting talks.

Meeting voted as one of the best and most practical meetings held.

Adjourned.

E. HAWKINS, Secretary.

VIGO COUNTY

The Vigo County Medical Society met in regular session February 10. Dr. Bayard Holmes of Chicago was the guest of the society and delivered a lecture on "The Silent Areas of the Brain," reporting several cases and exhibiting the Hoagland electric craniotome and universal bone engine in connection with the lecture. The lecture was an interesting one and stimulated many to thinking of a new field in brain surgery. He called attention especially to infectious causing brain abscesses when the focus of infection was rather remote and of long standing. The careful history taking in his case reports led us to realize that more careful and thorough history taking would probably result in fewer failures to diagnose cases.

Dr. Holmes' lecture was enthusiastically discussed and opened up a subject that many physicians know little about.

After the session a dinner was served in honor of Dr. Holmes.

Adjourned.

F. G. MCCARTHY, Secretary.

ABSTRACTS

ASPIRIN IDIOSYNCRASY

E. N. Reed, Clifton, Ariz. (*Journal A. M. A.*, March 7), reports the case of a patient who, after taking a capsule containing 5 gr. of aspirin for a cold, was taken with vomiting in about half an hour, followed by a "stiffness" in the throat making him think he was developing a tonsillitis. An hour and a half after taking the capsule his face was swollen and cyanotic, the eyelids edematous and almost closed and the conjunctiva injected, the whole face swollen, the breathing was labored and asthmatic, the nasal mucosa gorged, preventing nasal breathing, the buccal mucosa and pharynx were dark red and swollen, the uvula twice its normal size. The pulse was 120, soft and full, temperature 98. The breathing was such as one might expect with edema of the glottis. No treatment was instituted; the symptoms largely disappeared in six hours, but there was a fine, papular rash on the trunk the next morning. The patient reported a similar experience about a year before, lasting about five hours, after taking a capsule of $2\frac{1}{2}$ grains each of aspirin and phenacetin.

VOMITING IN PREGNANCY

A. H. Curtis, Chicago (*Journal A. M. A.*, February 28), reports a case of obstinate vomiting of pregnancy treated by means of injection of 15 c.c. of blood-serum drawn from a pregnant woman giving a negative Wassermann. It was defibrinated and injected into the muscular tissue of the back. Emesis continued but a larger proportion of food was retained. Five days later 10 c.c. of defibrinated blood from another pregnant woman with a negative Wassermann was injected and vomiting ceased completely in eighteen hours. Two subsequent injections were made within the next two days and treatment was then discontinued and the pregnancy progressed normally. The case is reported with the hope that others may use the treatment in similar cases.

HERNIA

L. P. Allison, Brownwood, Tex. (*Journal A. M. A.*, February 28), reports a case of strangulated hernia which had been diagnosed as orchitis, which it resembled. The patient was operated on because the lesion was suspected of being hernia. The operation revealed a large lobe of gangrenous small bowel in the scrotum; nine inches were resected, using a medium-sized Murphy button and a Bassini operation performed. The anesthetist reported the patient dying on the table but the operation was finished and at that time signs of life were seen. He finally made a good recovery, passing the button on the eleventh day.

TRAUMATIC RUPTURE OF THE HEART

B. J. O'Neill, San Diego, Cal. (*Journal A. M. A.*, February 28), reports a case of a boy who had been jumped on by some older boys causing a pain in the left groin. He walked home and was kept in bed for two days, then was up and about for four more days though still complaining. At no time did he complain of pain anywhere else. He was then brought 30 miles by train and walked two blocks to the physician's office. He walked with a decided limp. There was a slight swelling and redness over the left saphenous opening and considerable limitation of abduction and rotation of the left thigh. A roentgenogram showed nothing abnormal and a diagnosis of hematoma was made and hot fomentations applied. The temperature was normal, pulse 102 and regular and respirations 25. The patient rested comfortably for twelve hours, when he suddenly went into a state of collapse and died within an hour. A necropsy made three hours later showed the pericardium bulging forward and tense. It was found to contain about 500 c.c. of fresh blood and about 200 gm. of dark clotted blood evidently of some days' standing. A perforating slit was found, 3 mm. in length, just at the auriculoventricular junction of the left heart immediately above the middle of the anterior leaf of the mitral valve. No other lesions are reported. The traumatic rupture must have occurred when he was attacked, causing some hemorrhage into the pericardium which became sealed by a clot. This breaking loose caused the death from hemorrhage. The clot holding so long is remarkable. The case is of interest not only for its rarity, but as showing the value of a complete physical examination in every case. Had the chest been fully examined a more correct diagnosis might have been made.

MEDICAL OBSERVATIONS IN SCOTT'S ANTARCTIC PARTY

Surgeon Murray Levick of the "Northern Party" of Captain Scott's Antarctic expedition, in a lecture before the Royal Society of Medicine (*Med. Press and Circ.*, Feb. 4, 1914), related some of the medical aspects of their experience in the region of Robertson Bay where they spent most of the winter. This was 220 miles from the main base of the Scott party at Cape Evans and was a most inhospitable place, with very low temperature and constant high winds which prevented venturing on sledging parties, as had been planned. They were compelled to remain in camp practically all the time, and their supplies ran low. The supply ship was unable to approach them nearer than thirty miles on account of pack ice. They then had three weeks' provisions left. There were no materials available for building a hut and they burrowed through a snow-drift into clear blue ice, clearing a space 12 feet by 5 feet 6 inches and 4 feet high. They determined to save the food brought along with them, and laid in a supply of seal meat and killed about eighty old penguins. They lived on the meat and one biscuit a day. At one time there was a blizzard which lasted thirteen days, during which they were scarcely out of their sleeping bags. It took some time to get accustomed to the blubber which had a very strong flavor. It was found impossible to satisfy their appetites on lean meat, however much they ate. For light they teased out a rope which was used as a wick with the oil obtained from blubber. It was necessary to snuff the wick every five minutes to keep it going. For a stove they used the bottom of an oil tin and cooked by means of the blubber dropped onto bones. When the weather was 10 or 15 degrees minus they had to cut the meat by means of a geological chisel and hammer. They missed carbohydrates from the diet very much and at first there were very unpleasant symptoms. When they tried to save their salt supply by using ice salt they all had diarrhea, which improved when they resumed the use of the salt, only to return when it was gone. They had all the conditions conducive to scurvy, but were not afflicted that way. They concluded that it was impossible to have scurvy while living on fresh meat. The large quantities of seal meat, however, caused an excess of uric acid in the urine, and the passage of the crystals caused much pain. Enuresis and precipitate mriination with small reason for it were also among their troubles. The symptoms subsided on enforced low diet. Later severe constipation troubled them and difficult bowel movements were had only every two or three days, and several members of the party developed fissures and had hemorrhages. They killed a fresh supply of seals and on partaking heartily were troubled with a return of the uric acid and other symptoms. Then they tried boiling all meat for a half hour before eating it, with a disappearance of the symptoms. The roof of their igloo during the earlier period of occupation consisted of driven snow, which allowed of a sufficient oxygen supply. But severe weather following a partial thaw glazed this snow roof in such a manner as to shut off the oxygen supply so that the stove, the lamp, and the matches would not burn. Then they cut a hole through the roof and immediately there was no trouble with the fires. With this absence of oxygen the party suffered no ill consequences, not even a headache. Their freedom from such effects was attrib-

uted to the stimulant effect of the cold. Five months were spent under these conditions with comparative well-being, but then they felt themselves deteriorating physically and determined to leave. Three weeks before this time they began Swedish exercises and at the time of starting were fairly fit and marched well for three days. Then they began to feel stale. After three weeks of marching they found a depot left by another party. The butter, lard and chocolate they ate like apples. In the night they awoke hungry as ever and though they had eaten an enormous meal, ate again. One of the party who had been ill was well in twenty-four hours and remained well. All the remedies available failed to produce the good effects of this food. For several days after this they marched sixteen hours a day with only brief halts. In five weeks from the time they started they arrived at their base tired but fit.

OBSTRUCTION OF THE INTESTINE BY GALL-STONE

Intestinal obstruction by gall-stone, while noticed in the text-books, is so rare that many physicians of large experience have never encountered a case. One such is reported by R. L. Gibbon, Charlotte, N. C. (*Journal A. M. A.*, February 28). Operation was performed and the patient recovered. The stone was reported to be the size of an egg. Gibbon remarks on the literature and says that such an occurrence almost always presupposes a fistulous tract between the gall-bladder and the intestine, usually the duodenum, but occasionally the colon, but some strange cases have been reported, in which the stone had passed into the urinary bladder or the stomach. Few cases are diagnosed before the opening of the abdomen, and the cause of the obstruction was not determined in this case before the operation. Gibbon also remarks on the usually fatal outcome of this condition, which is shown in the experience of all writers on this subject.

DIAPHRAGMATIC PLEURISY SIMULATING GASTRIC ULCER

A series of eight cases of pleuritic adhesions of the diaphragm of tuberculous origin which produced a symptom-complex closely simulating gastric ulcer, is reported by L. S. Mace, San Francisco (*Journal A. M. A.*, February 28). The mechanical pulling of the adhesions of the diaphragm caused pain referred along the lower course of the intercostal nerves. There is no cough, fever or other suggestion of any lung disease, and the hemorrhage occurring seems to complete the diagnosis of ulcer. The patients are generally of a neurotic type and have for years been troubled with pain after eating. This goes through to the back and a tender spot can be found to the right of the lower dorsal vertebrae. Taking food or alkalies often relieves the pain, and vomiting always relieves it for a time. The patients often tell of prolonged courses of treatment on limited diet without results, except to hasten any latent tuberculous lesions. Surgical treatment makes matters worse. If such patients are examined for beginning lung tuberculosis, keeping in mind that the phrenic plexus and lower intercostal nerves may transmit pain to the abdomen, many operations for gastric ulcer may be avoided and the condition may be properly and successfully treated for incipient tuberculosis.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1913, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

SEROBACTERINS.—Serobacterins are emulsions of bacteria which have been treated by the application of the corresponding specific immune serum. Bacteria as treated are supposed to contain specific amboceptors so that immediate union with the complement of the patient's serum is said to occur. Hence, their action is supposed to be more rapid than that of ordinary vaccines. They are also said to be free from the negative phase and the general and local reactions produced by ordinary vaccines.

STAPHYLO-SEROBACTERIN, MULFORD.—This is a sensitized Staphylococcic Vaccine. H. K. Mulford Co., Philadelphia, Pa.

STREPTO-SEROBACTERIN, MULFORD.—This is a sensitized Streptococcic Vaccine. H. K. Mulford Co., Philadelphia, Pa.

TYPHO-SEROBACTERIN, MULFORD.—This is a sensitized Typhoid Vaccine. H. K. Mulford Co., Philadelphia, Pa. (Jour. A. M. A., Feb. 7, 1914, p. 457).

DISINFECTANT KRELOS, MULFORD.—A solution of cresols or higher phenol homologues and rosin soap. The phenol coefficient, ranging from five to seven, is stated on the label. It is an antiseptic, germicide and deodorant. Mulford Antiseptic Krelos is an almost black liquid, having a cresol-like odor forming a milk-like emulsion with water. The H. K. Mulford Co., Philadelphia, Pa. (Jour. A. M. A., Feb. 14, 1914, p. 537).

ANTI-ANTHRAX SERUM, MULFORD.—It is prepared by immunizing horses against virulent anthrax bacilli. H. K. Mulford Co., Philadelphia, Pa.

ANTISTREPTOCOCCIC SERUM SCARLATINAL, POLYVALENT, MULFORD.—The serum of horses treated with streptococci taken from scarlet fever patients. The H. K. Mulford Co., Philadelphia, Pa. (Jour. A. M. A., Feb. 14, 1914, p. 537).

CORPUS LUTEUM, CAPSULES.—Each capsule contains desiccated corpus luteum, Armour 0.3 gm. Armour & Co., Chicago.

CORPUS LUTEUM TABLETS.—Each tablet contains desiccated corpus luteum, Armour 0.13 gm. Armour & Co., Chicago (Jour. A. M. A., Feb. 21, 1914, p. 615).

GRANULAR EFFERVESCENT SALICYLOS.—Each 100 gm. contain strontium salicylate 6.54 gm., ammonium salicylate 6.54 gm. with an effervescing base of sodium bicarbonate, citric acid and tartaric acid. H. K. Mulford Co., Philadelphia, Pa. (Jour. A. M. A., Feb. 21, 1914, p. 615).

AMPHOTROPIN.—Hexamethylenamin camphorate, a compound of hexamethylenamin and camphoric acid. It combines the action of camphoric acid and hexamethylenamin, but is claimed to be free from the subjective gastric disturbances produced by camphoric acid and to be effective in smaller doses. It may be given dissolved in water or as Amphotropin tablets containing 0.5 gm. Farbwerke Hoechst Co., New York (Jour. A. M. A., Feb. 28, 1914, p. 697).

PROPAGANDA FOR REFORM

SAL HEPATICA.—Sal Hepatica, marketed by the Bristol-Myers Co., New York, has been refused recognition by the Council on Pharmacy and Chemistry because its composition is secret, because it is advertised indirectly to the public for the treatment of diseases, because exaggerated and unwarranted claims are made for its therapeutic qualities and because its name fails to indicate its chief constituents, but does suggest its use in liver disorders. The Council authorized publication of its report because the exploitation of Sal Hepatica is an important illustration of the way in which physicians are being made parties to the introduction to the public of a patent medicine the indiscriminate use of which must often have resulted in harm, direct or indirect (Jour. A. M. A., Feb. 7, 1914, p. 472).

ORRIN ROBERTSON AND HIS SEVEN SACRED OILS.—Robertson is a quack at present located at Arkansas City, Kans., who claims to remove gall-stones by means of "Seven Sacred Oils which grow in seven different climes." For the oil he claims "One oil acts specifically upon the entire head and throat. One oil acts directly upon the esophagus. One oil acts directly upon the stomach." And so it goes, each oil acting a little lower down, until we reach the seventh oil which "acts directly" on the rectum. Robertson also exploits a cure for cancer (Jour. A. M. A., Feb. 7, 1914, p. 473).

MU-COL.—"Mu-col for Cleansing Mucous Membranes" is a nostrum put out by the Mu-col Company (Inc.), Buffalo, N. Y. The following claims are made: "Mu-col obtains most gratifying results in catarrhal inflammations of the mucous membranes. Leucorrhea, tonsillitis, sore throat, cystitis, internal hemorrhoids, nasal catarrh and pus cases respond at once to irrigations with Mu-col solution. Strong solutions of Mu-col have proven of sterling value in treating hives, prickly heat, ivy poison, sunburn, eczema, typhoid and scarlet fever." Examination in the A. M. A. Chemical Laboratory showed Mu-col to be a mixture of sodium chlorid and borax, equal parts, with the addition of a small amount of aromatic substances (Jour. A. M. A., Feb. 7, 1914, p. 474).

PIORKOWSKI LABORATORIES NOT LICENSED.—The Public Health Service announces that statements which seem to emanate from the so-called Piorkowski Laboratories in various parts of the country to the effect that these laboratories have been licensed by the U. S. Public Health Service are incorrect. Instead, after inspection, a license has been refused the Piorkowski Laboratories of Berlin, Germany (Jour. A. M. A., Feb. 14, 1914, p. 553).

PYO-ATOXIN.—A box of Pyo-atoxin was submitted to the A. M. A. Chemical Laboratory for examination. The box contained thirty black capsules having the appearance of some of the popular gonorrhea nostrums. While the synonym "Pheno-Methylene-Formate" suggested that Pyo-atoxin was a definite chemical substance, the examination indicated that the powder contained in the capsules was a mixture of hexamethylenamin and methylene blue—two well-known drugs the value and limitations of which are known to the medical profession. Pyo-atoxin is sold by H. O. Hurley, Louisville, Ky., and is said to be "An antitoxin agent indicated in gonorrhea, cystitis, pyelitis and bacteriuric conditions" (Jour. A. M. A., Feb. 14, 1914, p. 552).

HEX-A-LITH.—Hex-a-lith put out by the Smith-Dorsey Co., Lincoln, Neb., is said to be a combination of hexamethylenamin and lithium citrate. As lithium citrate has a tendency to render the urine alkaline and

since hexamethylenamin acts only in an acid medium, the constituents of this preparation are physiologically incompatible (*Jour. A. M. A.*, Feb. 14, 1914, p. 555).

WHEN IS A PATENT MEDICINE?—While some physicians and especially some medical journals have trouble in classifying certain proprietary medicines, drug departments in department stores find the problem a simple one. In recent Chicago newspapers advertisements for Fellow's Syrup of Hypophosphites, Glycethymoline and Sal Hepatica look perfectly at home with Peruna, Circus Liniment and Beecham's Pills (*Jour. A. M. A.*, Feb. 21, 1914, p. 631).

LUCILE KIMBALL OBESITY CURE.—Lucile Kimball of Chicago comes to the obese with the message "I can make your fat vanish by the gallon." All that is needed, she says, is to take her treatment — no dieting, exercise or drugs are needed. The treatment consists of pink pills, which are reported to contain red pepper, menthol and bitters, probably gentian or quassia; brown tablets which the chemists declared to be an old fashioned cathartic pill and a powder, reported to consist of soap, Epsom salt and washing soda (*Jour. A. M. A.*, Feb. 21, 1914, p. 631).

LOUISENBAD REDUCTION SALT.—This is a white powder sold by Karl Landshut, Chicago, and is to be used dissolved in a bath. The A. M. A. Chemical Laboratory reported the powder to be composed of sodium sulphate, sodium chlorid and potassium chlorid. It is hardly necessary to say that taking a bath in a tubful of water in which a tablespoonful of the mixture has been dissolved would have no other effect than that obtained from bathing in the same amount of water without the mixture (*Jour. A. M. A.*, Feb. 21, 1914, p. 632).

EFFECT OF TARTRATES.—Many of the organic acids, such as citric and acetic, are burned up in the body, giving rise to carbon dioxid and water; thus sodium citrate, for instance, acts just like sodium carbonate in the organism. On the other hand tartaric acid and its salts are for the most part not destroyed in the body and leave it in their original form and animal experiments have shown that large doses of tartrates may give rise to symptoms of nephritis. However, while the claim made for a certain baking powder that the tartaric acid of cream of tartar in it is "wholesome" is evidently unwarranted, W. Post has shown that in the doses in which tartrates in the form of purgative mixtures, etc., is ordinarily given, are probably without harmful effects (*Jour. A. M. A.*, Feb. 21, 1914, p. 616).

ADMINISTRATION OF LECITHIN.—It has been shown many times that phosphorus in the form of organic compounds as it occurs in milk or in eggs probably changes in the body to phosphate and is subsequently elaborated into lecithin. In view of this there would seem to be no physiologic or biologic reason for preferring isolated lecithin as a medicament to milk or eggs. If it is believed that lecithin is indicated, the administration of one or two raw, or even cooked, yolks of eggs will supply all the lecithin that could be metabolized and presents it in a better manner than an artificial preparation (*Jour. A. M. A.*, Feb. 21, 1914, p. 615).

EVERY WOMAN'S FLESH REDUCER.—This obesity treatment is sold by the Every Woman Company, Chicago, Ill., and is a white powder smelling strongly of camphor and is of the bath-powder type. Examination in the A. M. A. Chemical Laboratory indicated the powder to be a mixture of alum, Epsom salt with an effervescent base of citric acid and sodium bicarbonate or possibly sodium carbonate with a small amount of camphor (*Jour. A. M. A.*, Feb. 28, 1914, p. 714).

"GET SLIM."—Jean Downs, New York, offers to reduce the obese with "a purely vegetable, pleasant, healthy drink." A box of "Get Slim" was examined in the A. M. A. Chemical Laboratory. It contained fifteen large envelopes, the same number of smaller envelopes and a package of powder. The large envelopes appeared to contain only sugar tinted pink. The contents of the smaller envelopes appeared to be tartaric acid, also tinted pink. The white powder was concluded to be sodium bicarbonate only. The sugar and tartaric acid powders are to be made into lemonade with the addition of lemon. The bicarbonate of soda is dissolved and the solution taken before meals (*Jour. A. M. A.*, Feb. 28, 1914, p. 715).

PAM-ALA, ANOTHER WORTHLESS QUININ SUBSTITUTE.—According to advertisements Pam-ala, sold by the Pam-ala Company, New York, is "A new and efficient remedy for malaria." Its general characters, particularly its cuminal-like smell, and also the advertising claims are very similar to Sinkina, a preparation which was shown to be worthless. Most of the testimonials sent out are rather old and are stated to come from physicians in Italy, Cuba, Porto Rico, Guatemala, etc. Two recent testimonials from physicians in the United States were investigated by the Council on Pharmacy and Chemistry and in each case it was found that the opinions had been based on insufficient trials and that the physicians on further use of Pam-ala had become convinced of its inefficiency. While the evidence indicated that the essential constituent of Pam-ala is oil of cumin, proven worthless in the investigation of Sinkina, a chemical analysis was not made by the Council because it was thought that the secrecy with which the identity of Pam-ala was surrounded and the extravagant and highly improbable claims were sufficient to condemn it (*Jour. A. M. A.*, Feb. 28, 1914, p. 715).

BOOK REVIEWS

PROGRESSIVE MEDICINE. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences, edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia, assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia. December, 1, 1913. Lea & Febiger, owners and publishers, Philadelphia, New York. \$6.00 per annum.

As is usual in the December number, Diseases of the Stomach occupy a very important place and receive an extensive review. More and more attention is being paid to the radiographic findings in many of the abnormal conditions of the stomach and intestines. The literature on Diseases of the Liver and Pancreas also receives quite an extensive review.

In Bradford's section on Diseases of the Kidneys, the functional tests are discussed pretty thoroughly and a very excellent resumé of Baetjer's article on Superpermeability in Nephritis finds place. Tuberculosis of the Kidneys and Tumors of the Bladder are also subjects that are interestingly discussed. In contrast to the literature of the last few years, the discussion of the prostate gland is unique in that the subject of perineal prostatectomy is not taken up.

As usual, Bloodgood's section is extremely well done and the latter part of it, which deals with bone surgery, is especially interesting.

Many interesting features are contained in the section by Landis and particularly so is his discussion of the benzol treatment of leukaemia.

ANATOMY, DESCRIPTIVE AND APPLIED. By Henry Gray, F.R.S., Fellow of the Royal College of Surgeons; lecturer on Anatomy at St. George's Hospital Medical School, London. New (English) edition, thoroughly revised and re-edited, *with the Basle anatomical nomenclature in English*, by Robert Howden, M.A., M.B., C.M., Professor of Anatomy in the University of Durham, England. Imperial octavo, 1407 pages, with 1126 large and elaborate engravings. Cloth, \$6, net; leather, \$7, net. Lea & Febiger, publishers, Philadelphia and New York, 1913.

When the student or practitioner thinks of a text-book on anatomy, his thoughts invariably turn to Gray's Anatomy as the standard. This new American revision of the eighteenth English edition, aside from many other improvements, is noteworthy because it employs the Basle nomenclature which provides a terminology based on scientific foundations and seems destined eventually to supplant the old nomenclature which has grown up without standard or system. The author states that except in one or two instances the Basle nomenclature has been adopted in its entirety. In most cases English translations of the Latin terms are employed, but in those cases in which the Latin terms have become fixed by routine usage it has been deemed advisable to retain them. Where the Basle nomenclature differs materially from the older terminology the latter has been added in brackets, and for further convenience a glossary is appended showing (a) the terms adopted in the text; (b) the Basle and (c) the old terminology.

The whole text has been thoroughly revised and, where necessary, rewritten. About 200 new engravings have been added; some of them replace older figures, but many of them are additional, and the majority of them have been drawn from original preparations. As in the later editions of Gray, the use of color in executing the anatomical boundaries adds materially to the value of the work.

At the present time Gray's Anatomy is a standard text-book with all teachers and students of anatomy, and it has occupied this unique position for over half a century. The numerous editions that have been printed have only increased the comprehensiveness of the subject presented, and the revisions have been entrusted to the leading anatomists, who have given especial attention to clarifying the text and including the latest accessions to anatomical knowledge.

As the publishers have well said: "As a teaching instrument, the new Gray's Anatomy embodies all that careful thought and unstinted expenditure can combine in a text-book."

THE PROTEIN SPLIT PRODUCTS IN RELATION TO IMMUNITY AND DISEASE. By Victor C. Vaughan, M.D., LL.D., Dean of the Department of Medicine and Surgery of the University of Michigan. Victor C. Vaughan, Jr., M.D., A.B., in charge of the tuberculosis work of the Detroit Board of Health, and J. Walter Vaughan, M.D., A.B., junior attending surgeon to Harper Hospital, Detroit. 12mo, 476 pages, illustrated. Cloth, \$3, net. Lea & Febiger, publishers, Philadelphia and New York, 1913.

Since the beginning of bacteriology the attention of research workers has been attracted almost exclusively to the living organisms and their effects on animals. The chemistry of bacteria and the reaction of the animal organism to the dead bacteria have with few exceptions received but little attention until very recently. One of the pioneers in this particular line of research now gives us in book form the results of his investigations extending over a period of fifteen years.

The theories regarding bacterial disease processes which the author formulates from his results, together with the results of others, explain many of the phenomena of infectious diseases which have hitherto remained unexplained.

The introduction consists of a brief discussion of the more important points brought out in the text. The next four chapters discuss the chemistry of bacterial cellular substances; the cleavage of proteins—bacterial, vegetable and animal—into poisonous and nonpoisonous parts, the former nonspecific, the latter specific; a comparison of the efforts of the living bacillus, the dead bacillus and of the poisonous split products of each of four organisms, *B. coli*, *B. tuberculosis*, *B. anthracis* and *pneumococcus* are then considered and a comparison made of their effects with the clinical manifestations that occur in infections with these organisms. The subject of protein sensitization or anaphylaxis is discussed next. This is the clearest and most satisfactory presentation of this very important subject of which the reviewer is aware. A very interesting chapter is that on protein fever in which it is shown that any desired type of fever, acute, intermittent and continued, may be produced by injections of foreign proteins.

J. Walter Vaughan contributes a chapter on the specific ferments of the cancer cell. The volume ends with a chapter which correlates the effects that the parenteral introduction of protein have on the animal organism with the manifestations of infectious disease as we know them clinically. While the investigations are purely abstract scientific ones, yet they open the field for many practical advances, some of which have already been put in practice.

Every medical man who wishes to understand as clearly as possible the processes which are occurring during disease will do well to read this book carefully as it embraces practically all the work which has been done on this particular subject.

THE DISEASES OF CHILDREN. By Henry Enos Tuley, M.D., with one hundred and six engravings and three colored plates. Second revised edition. C. V. Mosby Co., St. Louis, Mo. Price, \$5.50.

With the number of very excellent pediatric text-books on the market at the present time the appearance of this book is hardly justified. The general arrangement of the book is that found in the standard texts on the subject. There are a number of criticisms that can justly be made. The statement that the thymus gland grows smaller after birth is incorrect. That treatment is of no avail in enlargement of this organ is equally incorrect if we are to believe reputable surgeons and radiologists. The recommendation of Balsam of Peru and castor oil as a dressing for the umbilical cord hardly agrees with the practice carried out in the large maternity hospitals. It can scarcely be said that eating damaged corn is believed to be the cause of pellagra. In a book intended for the student and practitioner it hardly simplifies matters to have presented ten or more different methods for modifying milk for infant feeding.

However, there is a feature of this book that is to be highly commended and that is the detailed methods which the author gives for securing better milk. Not only are the methods given for maintaining a sanitary dairy, but also details for organizing milk commissions and the duties devolving on the members of such commissions.

AN INTRODUCTION TO THE STUDY OF INFECTION AND IMMUNITY. INCLUDING SERUM THERAPY, VACCINE THERAPY, CHEMOTHERAPY AND SERUM DIAGNOSIS. By Charles E. Simon, M.D., Professor of Clinical Pathology and Experimental Medicine, College of Physicians and Surgeons, Baltimore. New (second) edition, thoroughly revised. Octavo, 325 pages; illustrated. Cloth, \$3.25, net. Lea & Febiger, publishers, Philadelphia and New York, 1913.

This volume hardly demands a detailed review, in as much as the first edition proved that the author was exceptionally well fitted to discuss infection and immunity, a subject of ever increasing importance and one which because of the rapid advances made, many of which the general practitioner cannot keep track of, needs a master hand to present and correlate. In this edition important new sections have been added and a few minor changes made in the body of the work. The additions include sections on autoserum therapy (including the subdural injection of salvarsanized serum) and normal serum therapy, on the chemotherapy of pneumococcus infections and cancer, on the serum diagnosis of pregnancy (Abderhalden's test).

W. B. Saunders Company, publishers of Philadelphia and London, have just issued an entirely new eighty-eight page illustrated catalogue of their publications. As great care has evidently been taken in its production as in the manufacture of their books. It is an extremely handsome catalogue. It is a descriptive catalogue in the truest sense, telling you just what you will find in their books and showing you by specimen cuts, the type of illustrations used. It is really an index to modern medical literature, describing some 250 books, including thirty new books and new editions. A postal sent to W. B. Saunders Company, Philadelphia, will bring you a copy—and you should have one.

GONORRHEA IN WOMEN: ITS PATHOLOGY, SYMPTOMATOLOGY, DIAGNOSIS AND TREATMENT; TOGETHER WITH A REVIEW OF THE RARE VARIETIES OF THE DISEASE WHICH OCCUR IN MEN, WOMEN AND CHILDREN. By Charles C. Norris, M.D., Instructor in Gynecology at the University of Pennsylvania. Octavo of 521 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$6, net; half morocco, \$7.50, net.

This excellent monograph by Dr. Norris is unique in being not only a masterly treatise on a subject scantily treated in text-book literature, embracing the newest and best work on the subject, but in being at the same time so interestingly written that its message is carried not alone to the physician, but to the sociologist and the legislator.

No pains have been spared to make the historic description of gonococcal infection as complete as is at present possible, and the chapters on the bacteriology, pathogenesis and changes wrought by the organism are indeed well done. From the sociologic standpoint one could hardly gain a better conception, from any single work, of the economic cost of the black plague, especially that due to Neisserian infection, than is here presented.

Under the problems of prevention the author briefly reviews the efforts that have been made, especially in Europe, to control the spread of the disease through regulation and segregation, and justly concludes that, so far, such efforts have been marked with failure, and are fast being abandoned. Like most modern students of the question he concludes that the most potent remedy lies in education.

The author's stand relative to conservative surgery of the adnexa, the seat of gonorrheal infection, is well taken: viz: that because of its inaccessibility to local treatment by burying itself into the tubal mucosa, the infection is liable there to lie dormant ready to burst forth anew at any moment, while the ovary offers no such field for the organism's resting place, and hence becomes one of the last places to be attacked. Fortunately, however, the removal of the gonococcal tube need not be a part of a double salpingectomy, provided the other tube can be proven healthy, for oftentimes the infection is a unilateral affair and remains so. All told, the subject is admirably presented, the illustrations excellent, and with the exception of an occasional typographical error the publisher's work is of the highest grade.

MANUAL OF OBSTETRICS. By John Osborne Polak, M.Sc., M.D., Professor of Obstetrics and Gynecology in the Long Island College Hospital; Professor of Obstetrics, Dartmouth Medical School, Etc., with three color plates and one hundred and nineteen illustrations in text. Flexible leather; price \$3.00. D. Appleton & Co., New York, 1913.

This book is of value chiefly to students and beginning practitioners. It is intended only as a text-book of the fundamental elements of obstetrics, and in the author's word "as a guide in following the didactic and practical teaching of the college course." Historical and extensive statistical data are purposely avoided, as are the more theoretical discussions and elaborate details that serve only to confuse the beginner in the subject.

The text, though condensed, does not give the impression of merely cataloging facts, and is distinctly readable. Proper emphasis is laid on the more important passages by frequent recourse to italics. The chapter on the management of labor is exceptionally noteworthy. In completeness it rivals similar chapters in the larger treatises on the subject and is full of detailed directions for the preparation and care of labor cases, which are of such vital interest to those young in the practice of obstetrics, however much a matter of second nature they may have become to the experienced obstetrician. The book is bound in limp leather and is a positive pleasure to handle.

MINOR AND OPERATIVE SURGERY, INCLUDING BANDAGING. By Henry R. Wharton, M.D., Professor of Clinical Surgery in the Woman's Medical College, Philadelphia. New (eighth) edition, enlarged and thoroughly revised. 12mo., 700 pages with 570 illustrations. Cloth, \$3, net. Lea & Febiger, Philadelphia and New York, 1913.

The fact that this work has now reached its eighth edition testifies to its value in a field which has been too much neglected in our medical schools. As a text-book and reference work for bandaging and minor surgical technic it serves an excellent purpose. In this edition the author brings his work up to date and includes many more of the recent procedures, such as salvarsan injections, intratracheal insufflation, regional and spinal anesthesia, etc. The author has also added an extremely useful chapter on operative technic intended for use of medical students in conjunction with their courses in operative surgery on the cadaver. The descriptions of the various techniques are clear and complete throughout and are well illustrated—frequently by photographs.





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ENTERED AS SECOND-CLASS MATTER, JAN. 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, IND., UNDER ACT OF CONGRESS OF MARCH 3, 1879.

*From article on "Infant Feeding," by John Lovett Morse, A. M., M. D., Boston, Associate Professor of Pediatrics, Harvard Medical School; Associate Visiting Physician, Children's Hospital and Infants' Hospital.—In the *New York Medical Journal*, March 8, 1913.

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FORT WAYNE, IND., APRIL 15, 1914

NUMBER 4

ORIGINAL ARTICLES

A BRIEF CONSIDERATION OF THE OCCUPATIONAL TRAUMATISMS OF THE EYE *

E. M. SHANKLIN, M.D.
HAMMOND, IND.

But few years ago it was a commonly accepted fact that the great number of cases of partial or total loss of vision in the large industries of the country was but the necessary toll exacted in the production of the factory output. Little or no effort, certainly no concerted one, was made either by employers or oculists to remedy the cause of this unnecessary evil.

Coincident with the publicity given the matter of preventable blindness came the primary investigations along the line of so-called industrial blindness. Conservation of vision was made a matter of study by committees from the American Medical Association and the various state societies, and at about the same time several large manufacturing plants began looking into the question through the appointment of safety committees.

That these two forces working to a common end have made wonderful progress cannot be questioned. One casualty manager, in a paper written a few years ago, says: "Up to two years ago our plant followed the usual custom of protecting itself from money losses due to accidents under employer's liability policies. Investigations were made several times with a view to ascertaining the probable cost and risk of carrying its own insurance, but on account of the hazardous character of its work, the insurance was continued until we came to the realization of the economies of safeguarding. It then be-

came apparent that the company could control, to some extent at least, the frequency of accidents among its employees, and this assumption has been borne out by actual experience."

To one who has studied this great problem of conservation of vision, particularly that having to do with industrial blindness, the most pleasing fact to be learned is that the large employers of labor seem to lose sight of cost or profit in the management of these safety departments, and lay the greatest stress on the fact that they are saving men's eyes.

This discussion may be divided into:

1. The cause and the prevention of eye injuries.
2. The proper care and treatment of these injuries.

The primary injury is not alone responsible for all the cases of partial or complete loss of vision. Among the most potent factors are:

1. Meddlesome interference on the part of fellow employees.
2. Lack of proper care and treatment by the "company doctor."
3. Failure of the employe to regard the injury as serious.

The more common forms of eye injuries, as I have observed them, are:

1. Foreign bodies in the cornea. Of these, perhaps the most common is emery dust. Cinders and small particles of steel are next in order.
2. Penetrating wounds of the cornea.
3. Burns of the cornea.
4. Corneal ulcers, following infection of neglected abrasions of the corneal membranes.
5. Injuries due to exposure to intense light and heat.

Two of the greatest evils in the modern steel mill or foundry are the "handy man" in the mill or shop, and the "storeroom expert." In practically all shops we find the man reputed to

* Read before the Indiana State Medical Association, West Baden Session, Sept. 25, 1913.

be "handy" in the extraction of foreign bodies from the eyes of fellow workmen. His method usually consists in the use of a match or tooth-pick. One large steel company reports 250 cases of blindness due to this pernicious habit. The "storeroom expert" is not so numerous, but he is as great an evil as his brother of the shop.

It is the usual custom to order all injured employees to the storeroom. There the "expert" looks the case over and decides what shall be done. Too often, particularly in eye cases, he decides that the services of a surgeon are not needed, and renders such aid as he deems necessary and sends the man back to work. Complete loss of vision in one or both eyes frequently can be traced to this practice.

Perhaps a problem as great is the "company doctor." While we often find one of this species who has profited by his past mistakes and experiences, and is successfully treating eye injuries, yet a large per cent., either through carelessness or lack of knowledge of the matter, are content to make cursory examinations, flush the cul-de-sac with boric acid solution and dismiss the patient with no further instructions. To the fact that complete examinations are rarely given may be attributed a large per cent. of the cases of injury to vision.

One or two illustrative cases are cited to show the need of care in this work. W. B., aged 19, struck over the left eye by a flat piece of steel: the company doctor flushed the eye with boric acid solution, and, in spite of the fact that the boy declared he could not see, ordered him to go back to work. The case reported to the doctor the following day, and the doctor angrily ordered the boy to go to work, stating that the eye was not injured. About five days after the accident the patient saw another physician, who referred the case to me. On examination I found a rupture of the anterior capsule, cataractous lens, and the iris adherent anteriorly, for about two-thirds of its circumference. After a long period the lens substance was absorbed, but the synechiae persisted.

In another case in which the company surgeon had, without consultation, advised enucleation, the eye was saved and fair vision retained.

The most common mistake in these cases is the failure on the part of the surgeon to use atropin. While this is by no means routine treatment, yet we know that this drug has saved us much trouble in certain cases. The average general practitioner is afraid of atropin, fearing glaucoma. Another contributing cause in the large number of cases of defective vision is the

failure of the patient to do his part. One of the real tasks of the oculist, in many instances, is to convince the patient of the necessity of hospital treatment. Again, they do not realize that though the injury may be limited to one eye, they must not overexert the fellow eye.

The work that casualty and safety departments of the great industries of the country are doing should command the admiration and support of all eye surgeons. Even a brief study of their work will convince one of their vast benefit. "Safety first" is the slogan now heard on every side in the great manufacturing district of the Calumet region. The men in charge are highly enthusiastic in their work, and well they may be. One of the pioneers in this work is Mr. W. H. Cameron, casualty manager of the

IS HE HAPPY?



Yes! He wore his goggles while chipping in the foundry yard and saved his eye when a chip flew from casting and struck him.

American Steel Foundries, comprising nine plants. Less than three years ago he organized this department, and the results obtained make an interesting study.

During this period the number of eye injuries was reduced 80 per cent. In the six months from July to December, 1910, 6.5 per cent. of all employees suffered eye injuries. In the same period in 1912 the number was reduced to 1.6 per cent. Mr. Cameron at once saw that protection of the eyes was a most important matter, and immediately began experimenting to find a goggle that would be at once effective and convenient. The fact that the goggles now in use in his plants have been so successful in accident prevention is evidence that his experiments were not in vain.

These goggles are made from clear, strong glass, with a substantial, non-corroding white-

metal frame. They come in a varied assortment of bridges and are comfortably worn. As proof of their effectiveness, we have the following report: At the end of the first six months they were in use, there were returned, from one plant alone, forty-eight pairs with one or both lenses broken, due to flying particles of steel, etc. From the nine plants of this company, in a like period, 287 pairs met with similar damage. During the past twenty-seven months but three men have lost an eye while at work in these plants, only one of whom was wearing his goggles at the time of the accident.

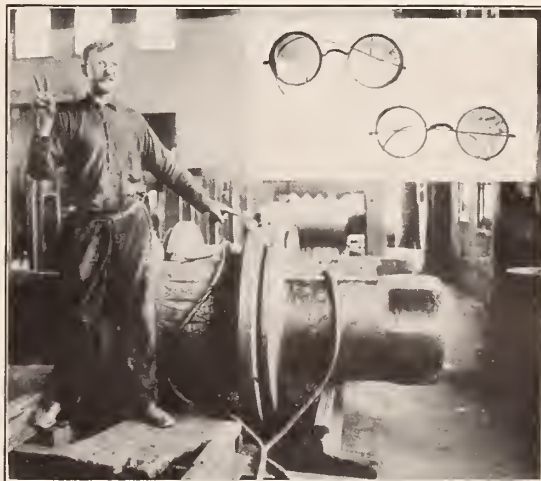
In order to prevent the spread of trachoma, so prevalent among the foreign laborers, the utmost care is taken to see that men do not exchange goggles. Ladlemen are supplied with bifocals, blue above and clear below. Workmen with defective vision, particularly the myopes, are given correcting lenses.

Mr. Claude J. Smith, safety inspector of the Indiana Harbor works of the Inland Steel Company, is another conservation of vision enthusiast. Like Mr. Cameron of the American Steel Foundries, Mr. Smith was the pioneer in this work in his plant, having taken charge two or three years ago. In this time but two eyes have been lost. One case was due to the explosion of a mold adjacent to the victim. The other case was that of a man who had an infection of a corneal wound alleged to have been received in the mill. The ulcer was absolutely neglected for about ten days, during which time he was on a spree. Mr. Smith reports frequent infections of neglected corneal wounds. In one department he found that the men neglected to wear goggles while pouring molten iron into a pig mold. Eye injuries were frequent here. He suspended a window in front of the operator, and the accidents immediately ceased. His experience with goggles was like that of Mr. Cameron; the men would not wear the old-style goggle, but since the present protectors have been in use they do not object to them.

Vision is also affected by exposure to intense light and heat incident to the manufacture of iron products, particularly in the blast and open hearth furnace. It has been shown that 2,000 degrees F. is the limit at which one can safely work without eye protection. Blue glasses are necessary when the heat reaches 2,700 to 2,800 degrees F. In the Bessemer process the metal is heated from 3,000 to 3,200 degrees F., and the operator uses a spectroscope at a distance of thirty feet from the blast. Men employed in electric welding are furnished with an aluminum helmet, as well as with blue glasses.

The matter of traumatism of the eye as relates to railroad employees is receiving unusual attention from the railroad companies at this time. The "safety first" movement is meeting with a very warm support in these quarters. Mr. George Bradshaw, general safety agent of the New York Central Lines, has crystalized a great deal of truth in the following statement: "The great majority of injuries in shops and roundhouses, very naturally, occur in the use of tools, machines and appliances. Of the preventable portion of this class of injuries, according to my observation, a larger percentage is due to improper physical conditions than to improper methods, or personal carelessness. Laxity or incompetency of factory supervision plays an important rôle in the matter."

TWICE IN THE SAME PLACE



HE IS NOW A FIRM BELIEVER IN THE USE OF GOGGLES

Mike Bersina, a roll chipper at the Gary works roll shop, didn't believe in goggles. He was induced to wear them. On August 5 a chip struck and broke the pair he was wearing. He got another pair and one week later these goggles were struck and broken by a chip. Mike's eyes are as good as ever.

The appointment of local oculists in the larger cities and at division points is becoming more general than ever before, particularly among the great trunk lines. My observation has been that traumatism of the eye are more serious among the trainmen than in those employed in the shops. I believe this is due to the fact that shopmen are sent to the oculist at once, while the trainmen do not receive aid until the completion of their runs, usually some hours after injury. When these men come in with cinders, etc., imbedded in the cornea, and having had no treatment for many hours, the eye is highly inflamed, and demands other treatment than simply removing the offending foreign body. It is in these cases that the general practitioner errs,

in giving no directions as to the care of the injury. The eye surgeon at once recognizes the need of further care and the patient is usually saved much time and distress.

Immediately above the entrance to the Gary works of the Illinois Steel Company one sees a large sign, as follows: "Careful men are usually efficient; careless men are not." Posted on the bulletin boards throughout the plant are scores of notices equally trite. Major Kenneth M. Burr, in charge of the safety department, is a firm believer in "advertising" as a means of accident prevention, and this belief finds its outlet in very cleverly worded and uniquely arranged placards posted about the plant, and by means of photographs and the stereopticon. One of the placards deserves special mention. It reads as follows: "If you are injured, no matter how little, tell your foreman and go to the doctor. A slight injury may cause blood-poison."

Recognizing the truth of the adage that familiarity breeds contempt, Major Burr changes the forms of these signs frequently, though the wording remains the same.

When asked as to the injuries affecting the eye, he told me they were not frequent. By investigation of the method used to prevent these accidents, one readily understands why this is true.

On the theory that men may not read signs but will look at pictures, photographs of various accidents are posted about the plant. Suggestions for prevention of such accidents accompany the pictures. The story of an accident is presented by a series of photographs such as I have here. In the department covered by this particular set of pictures eye accidents are now rare. The stereopticon is used especially during the short days of the year. Pictures of men at work in various departments are thrown on a screen at the main gate, at the time when the night and day shifts are changing. Notices pertaining to safety are alternated with the pictures. The use of goggles is urged on the men in certain departments, and the goggle in use is the same as is used in the American Steel Foundries. Correcting lenses are not given the men in the Gary mills, though Major Burr believes the time is near when this will be done.

My investigation of the occupational traumatism of the eye leads to the following conclusions:

1. That the safety first movement is successful insofar as related to eye injuries, at least.

2. That the large employers of labor are giving more and more attention to the physical care of their employees.

3. That there should be cooperation between oculists and the men in charge of safety departments.

4. That publicity be given the fact that even slight injuries of the eye may prove serious, and should have immediate and competent attention.

5. That the "storeroom expert" is a menace to the eyesight of the workmen he attempts to treat. Likewise the handy man in the mill.

6. That eye surgeons should be regularly appointed by all the larger mills and factories, and in the railroad centers.

DISCUSSION

DR. H. C. PARKER, Indianapolis: The realization of the fact is at hand that we in this country are careless of life and limb. If the recog-

IT IS BETTER TO WEAR GLASSES THAN A GLASS EYE



On May 23, Mike Mazurkiewiez, No. 18213, a laborer at machine shop, was using a hand hammer and cold chisel, chipping keyway in shaft. Chip flew from shaft, shattering right lens of goggles which man was wearing. Man's eye was uninjured.

nition of this was not brought about by humanitarian motives it became necessary because of economic ones. In this day of keenest competition the "casualty man" of a large corporation is as important in keeping down "overhead" as are the experts in the various departments.

Whatever motive started the "safety first" movement, it is apparent on every hand that employers and employees are seeing the light, to the great economic gain of both. The regret is that although the "safety first" movement is widespread geographically, it is as yet seen only by those employers of a larger outlook on life, and is not universally adopted. However, the start is encouraging.

Like Dr. Shanklin, I have seen pitiable cases of neglected or badly treated accidents, which, if seen early by a competent oculist, would have been trivial in their effect. We as a profession, though, are more or less tied down by our ethics

from insisting on adequate protection for fear of being accused of "looking for the money" there is in it. We cannot take a money-saving proposition along medical lines to a "casualty man" of a corporation, in the same way that a representative of a smokeless combustion furnace could take his wares to a purchasing agent; and yet, why should we not? Even should our efforts result in a little more income to us, they would also result in a tremendous saving of time and suffering to those who are employed in such work as to be liable to occupational traumatism.

Dr. F. C. HEATH, Indianapolis: The essayist has given us a real contribution to this subject. I think there is very little in the text-books. The most that I can find is in the few pages in the fine work of Dr. Wurdemann on "Injuries of the Eye," and that is confined principally to statements about the use of pneumatic fans connected with some machinery, the use of screens in the protection of the workers, and also the use of goggles or eyeglasses, and the difficulty in getting the men to use them. There are some illustrations in the book. But the doctor has given us something worthy of printing, a real addition to this subject.

Attention has been given this subject of the prevention of these injuries in many factories in the last ten years, so that the last census report shows a much smaller percentage of blindness from occupational traumatism of the eye relatively than in preceding decades.

As an illustration of one thing the doctor said, about the meddlesomeness of the employees and the danger of the handy man around the mills, I remember a case that I had of a man who had something in his eye, in the Atkin's Saw Works, and the handy man had removed it, but, not content with this, he had also prescribed for the eye. He prescribed a saturated solution of lead. That lead was imbedded in the cornea, making a permanent white opacity there. It was quite near the center of the cornea, and the man's effort to see around this later caused a strabismus—a very serious result.

Just one other thing I want to emphasize, and that is the importance of using the Roentgen ray in cases where you are not sure whether a foreign body is in the eye or not. We are not justified in saying that we think there is no foreign body in the eye. We have come to the point now where for our own safety as well as for the good of the patient we have got to know whether there is a foreign body in the eye. Fortunately, by means of the Roentgen ray, we can in a very large proportion of cases know it. I have had some of those cases, and we are fortunate enough to have one or two men in Indianapolis who are expert in the localization of these foreign bodies. We have had some very nice removals of foreign bodies, which were found to be in the exact positions indicated by the Roentgen ray pictures.

In this connection I want to mention one case of some importance in our courts. A general practitioner had a case in which an eye was lost and a suit for malpractice brought against him. The plaintiff's lawyer went to one hundred and fifty doctors in Indianapolis before he could find one who would testify against a doctor. Finally he found two doctors—doctors without experience in the eye—who went on the stand and testified. One of them said that he had been Dr. Good's assistant, but Dr. Good denied this, and said that he knew very little about the eye. Those two men testified this way: They said that the Roentgen ray was an easy thing to use; that every doctor was now equipped with the Roentgen ray and could localize foreign bodies in the eye with the use of the Roentgen ray. This was absolutely untrue. We men who are doing eye work do not do the localizing ourselves. We send this work to those men who are competent to do it, and who can localize exactly these foreign bodies in the eye. And so the doctor lost his case. I had a talk with the judge, and he sympathized with the doctor, and really wanted to set aside the verdict, but, of course, was unable to do so. He said: "If I could feel satisfied that the man who lost the eye would have had the same result if he had seen some of the skilful eye men in Indianapolis instead of this general practitioner, I might set aside that verdict." He was a very conscientious judge, and he could not see his way to doing it.

I want to emphasize that it is important for our welfare as well as for the welfare of the patient, that we have the Roentgen ray employed in such cases.

Dr. GEORGE F. KEIPER, LaFayette: I am very glad that this paper has been brought before us, as it will in a large measure commit this Section to the doctrine of conservation of vision. It is a matter of very great regret to me that it was impossible to get before the sessions, in order to show a number of slides which I have in my possession which demonstrate how eyes are being saved by the guarding of machinery, but somehow or other it was impossible to make a demonstration of that kind. I went before the House of Delegates last night with those slides in making this report, and attempted to pass them around, in order to show what work we are attempting to do along this line, and with some objections overcome we succeeded in having the Association appropriate enough money to buy those slides, so that they can be circulated around the State, so that we men who are here to-night may take these slides and educate the public by use of the stereopticon.

Another thing we got the Association to do was to appropriate one hundred dollars in order to conduct a newspaper propaganda. Dr. Shanklin comes here to-night with a lot of valuable material from which reproductions can be made for publication through the newspapers, and we

will get the American Press Association to help us out in this matter.

Railroad shops of all kinds are recognizing the fact that the eye is a very valuable organ. You know, they figure it out as the casualty companies do. If a man is insured for five thousand, his eye is worth one thousand. The loss of both eyes is equivalent to the loss of life. So they are figuring this thing out from the strictly business standpoint more than from the sentimental standpoint, and they realize that there is some need here of attempting to save the eyesight of their employees.

In the report which our Committee made to the House of Delegates last night, we stated that the Monon Railroad, since it adopted these preventive measures, has only one time found it necessary to have an eye enucleated because of irreparable damage.

There is a great work to be done here, and to this work I believe that we as a Section ought to commit ourselves, not only by resolution, but also by way of educating the public. By throwing a picture on a screen you can do more in a minute than you can tell the public in an hour without the picture, and for that purpose we have these fifty-odd slides to send around the State for this education of the public in the conservation of vision.

DR. SHANKLIN (closing): I believe that I have nothing further to offer, except to thank the members for the generous manner in which they have received this little contribution.

A CASE OF TYPHOID PERFORATION, EARLY OPERATION, DEATH FROM SUPPURATIVE PERITONITIS FIFTY-FIVE HOURS AFTER OPERATION *

BEN PERLEY WEAVER, M.D.
FT. WAYNE, IND.

It is not with the idea either that there is anything unique in this case or that the ultimate issue of our efforts was successful that this report is made, but rather because there is in it, for me at least, a lesson from which I hope for profit, if in the future it becomes my lot to meet with a similar circumstance.

J. B., American, aged 23, laborer, was admitted to Hope Hospital Oct. 1, 1913, complaining of sore throat and of having felt ill for five days previously. Temperature on admission was 101.6 degrees, pulse 90, respiration 22. His temperature-pulse ratio immediately assumed

the typhoid type, the temperature varying between 100 and 104.2 degrees, with a pulse running from 72 to 100. Being a county charge, Dr. Tinkham was asked to care for him, and through his courtesy I first saw the patient during the second week of his hospital residence, because of some suspicious râles in his left chest, cough and respiratory pain, associated with a slightly blood-stained sputum. Although the breath-sounds at that time were somewhat harsh, with a few coarse râles, yet no percussory areas of dulness could be demonstrated and it was believed that the blood came from the nasopharynx. The earlier diagnosis of typhoid seemed correct and the Widal was positive on October 14. The chest symptoms subsided somewhat, as did the diarrhea, which had characterized the earlier part of the illness, and the patient ran the usual course of a moderately severe typhoid until the morning of the 21st, when at 7:50 a saline enema of 1 pint was given with a return of 1 quart, very dark and containing small particles of fecal matter and clots of blood. Pulse at that time was 96, temperature 102.6 degrees, respiration 24. The ice-bag was immediately applied to abdomen, morphin gr. 1/4 hypodermically, calcium chlorid gr. X. t. i. d. ordered, and the foot of the bed elevated. Patient was quiet and comfortable the remainder of the day until evening, when he was awakened for temperature reading at 8 p. m. Temperature at that time was 105 F., pulse 112, and he began screaming with hypogastric pain and desire to void urine, ten ounces of which he passed voluntarily but without relief from pain. At 8:10, when I saw him, he was still complaining bitterly of pain in hypogastric area but was distinctly tender in right iliac fossa, hypogastrium and left iliac and lumbar areas. Rigidity was present but no distention. The excruciating pain lasted but a few moments longer and was followed by a period of considerable relief from pain but with same areas of tenderness and rigidity. Diagnosis of perforation was made, and at 9 p. m., under ether at the hands of Dr. Porter, Jr., and Dr. Tinkham assisting, a right rectus incision was made and the abdomen opened and explored as rapidly as possible. In the lower two feet of the ileum several ulcers could be palpated, the mesenteric vessels were deeply engorged and finally a pin-point perforation found at the base of an ulcer which felt to be about the size of a quarter. The area was quickly inverted by a purse-string catgut suture and overcast by a continuous mattress linen suture in an oblique direction so as to constrict the lumen as little as possible, the surrounding

* Read before the Fort Wayne Medical Society, Nov. 4, 1913.

area and the free sero-sanguinous fluid of the abdomen wiped and layer closure made, leaving a rubber dam roll drain down to right iliac fossa. Time of operation, forty minutes. Patient was returned to room with pulse of 140 and put in Fowler's position. Within the next hour reaction was followed by a pulse of 112. However, even with the aid of morphin, sleep was only intermittent, patient being decidedly restless throughout night but without pain. Dressing saturated with sero-sanguinous fluid was changed at 10 a. m. on the 22d; distention and tenderness rather diffuse at that time. Patient sweating, nauseated, extremities cold. Symptoms of diffuse peritonitis continued until death on the morning of the 24th at 4:47. Post-mortem of the abdomen revealed wound sealed, no other perforations, diffuse purulent peritonitis with imperfect drainage.

It is the last-named feature, namely, imperfect drainage, that I wish to discuss more in detail, since it would seem that with the diagnosis as early established as in this case, one should have succeeded in placing it in the column of recoveries rather than deaths, even though the odds are two to one against such termination, the mortality ranging from 65 to 75 per cent. I feel that had we placed a good-sized tubular or even loose gauze drain well down to the depths of the recto-vesical pouch, supplemented by Fowler's position, our result might have been more favorable. The reason for not so doing was the fear lest pressure of any one of the several ulcerated areas against such somewhat rigid drain might result in further necrosis and possibly another perforation. Again proctoclysis was not begun immediately for fear of the possibility of increasing peristalsis and more hemorrhage. If given quite slowly, however, the danger from this source should be slight, and with the development of the spreading peritonitis in this case, proctoclysis, 20 drops per minute, was instituted."

Relative to drainage in typhoid perforation, McRae, in Osler's *Modern Medicine*, with an experience of forty-three cases of perforation in 1,500 cases of typhoid fever at Johns Hopkins Hospital, twenty of which were operated on, with seven recoveries, says that "drainage, for which gauze is best, should always be used if a perforation has been found and is advisable after exploration when no perforation is found, if there be deep ulcers which may perforate later."

Weller Van Hook, writing in Keen's *Surgery*, says: "The diagnosis having been made, operation must be performed immediately. Closure

of the perforation and drainage constitute the surgical requirements."

Greaves, writing in the *British Medical Journal* in 1906, and quoted by Van Hook, advances what seem to the writer to be some very fallacious arguments against drainage, such as the mechanical disadvantage of the fluid being forced uphill when the patient is on his back; the presence of the drainage-tube adding to the difficulties of nursing and disturbing the quiet of the patient; the drainage tube providing an open path for the intrusion of germs from without; the occlusion of the drainage tube, if flexible, and if rigid, injury, by pressure, of the intestine or bladder, a fecal fistula having resulted from such pressure; hernia of some portion of the bowel, such as the appendix, Meckel's diverticulum, appendix epiploica or part of the great omentum on withdrawal of the tube. He asserts that drainage should be reserved for the most septic cases. What of a fecal fistula or a hernia if a life has been saved in its production? Also the bugaboo of uphill drainage has long since been exploded.

Mitchell, also quoted by Van Hook, had three recoveries in seven operated cases, a mortality of 57.1 per cent. He used gauze drainage in every case. In Keen's work on "The Surgical Complications of Typhoid Fever" he makes the following emphatic assertion: "In no case, it seems to me, should the abdomen be entirely closed. Drainage should be the rule. If peritonitis arise from other cause than typhoid perforation, scarcely any surgeon would think of closing the abdomen; and the same rule should hold good here."

In conclusion I should like to emphasize just a few points that seem paramount to me:

1. Do not depend on the thermometer for the diagnosis of this complication of typhoid fever, as recommended by Dieulafoy. The temperature may fall but it is just as apt to rise, as in our case.

2. Do not wait for the pulse to show a marked increase.

3. A leukocytic increase may be due to other complications and only leads to delay.

4. Where previously absent, the development of tympany means advance of the resulting peritonitis.

5. Pain, tenderness and rigidity are the most reliable criteria, and to the watchful eye certainly justify exploration.

6. Ample drainage, Fowler's position and slow proctoclysis would be my régime in another case.

INDICATIONS FOR SURGERY OF THE ETHMOID AND SPHENOID LABY- RINTH WITH REPORT OF CASES *

JAMES McCALL, JR., M.D.

TERRE HAUTE

Whatever one may say on the subject of ethmoidal and sphenoidal infections is "carrying coals to Newcastle" in the light of the fact that so very much has been written on the subject during the past two years. But the subject grows increasingly interesting as our knowledge of the etiology and symptomatology of diseases of the accessory cavities of the head increases, and as we are able to observe what prompt relief and brilliant results we get by some simple procedures, and some not so simple, in cases which for years have distressed the patient and the family doctor, due to our previous lack of knowledge of the relationship of sinus diseases to head pain and reflexes generally.

What is the ethmoidal labyrinth? It is catarrhal possibility in the form of a cellular structure imposed between the orbital cavities, forming part of the nasal wall, and of the roof of the nose; likewise enters largely into the nasal side of the orbital cavity. The labyrinth is made up of a various number of cells, sometimes less, sometimes more, which communicate with the nose proper. The anterior cells empty under the middle turbinate; the posterior cells empty above the posterior end of the middle turbinate.

What is the middle turbinate? It is a trouble-maker, extending downward from the roof of the nasal cavity; an off-shoot from the ethmoid bone, and is probably a guardian of the middle fossa of the nose, as it is so situated that it presents, in a normal position, all sides except its attachment to the inspired air which is warmed on its way to the lungs. The many ethmoid cells of various shapes and sizes, being lined with mucous epithelium contiguous with that of the nose proper, open into the nose by small osseous and secrete mucus the same as the nasal mucous membrane. This cellular structure is evidently for two purposes; first, to give resilience to the cranial structure, as the ethmoid and sphenoid bones are the keystone that bind the cranial and facial bones together, and by being cellular reduce to a minimum the shock from blows on the head. Also, they give resonance to the voice. Being so intimately associated

anatomically with the cranial structures, they must of necessity derive their nerve supply and blood supply from much the same source.

The blood-vessels supplying the ethmoidal labyrinth are the superior nasal branch of the sphenopalatine; also the anterior and posterior ethmoidal arteries, which are branches of the ophthalmic artery entering the ethmoidal walls through the small foramina in them. The veins are divided into two groups, the ethmoidal group returning along the course of the arteries, and emptying into the ophthalmic vein, which then empties into the cavernous sinus; the ethmoidal veins on the cribriform plate anastomose freely with the veins of the dura and superior longitudinal sinus, which explains why thrombosis of these sinuses can occur so easily from purulent ethmoiditis.

The lymph supply is very abundant in the middle nasal fossa, communicating freely with the cranial ocular and pharyngeal lymphatics. Besides the cellular structure of the ethmoid we have two points of interest concerned anatomically in the consideration of diseases of the labyrinth, for they are often causative factors. They are the bullae ethmoidalis and the uncinate process. The bullae is the anterior and lower end pocket cell of the labyrinth, and is an enlarged cell protruding into the nose under the middle turbinate body, which by its constant curvature and equal distance from the uncinate process (a ridge curving downward and backward from just below the frontal sinus) forms a channel called the hiatus semilunaris. This channel in a normal state is a necessary adjunct to healthy drainage from the anterior ethmoidal and frontal sinuses, and by reason of its lying so closely below the anterior end of the middle turbinate is particularly liable to be involved in any acute inflammatory affection of the nose, due to the swelling of the middle turbinate which completely blocks off the drainage of the aforementioned cells.

The nerve supply and distribution of the ethmoid is of most interest, for it is more often the patient comes to us for relief of pain in ethmoidal troubles than for the relief of nasal symptoms. The second branch of the fifth nerve is in extensive relation to the post-ethmoidal and sphenoidal cells, both the sensory and motor portion. The sympathetic or vidian also lies on a part of the sinus where it would be most likely to be affected if the sinus were inflamed. Also the sympathetic nerves have a very close relation to the walls of the sinus, as the sympathetic nerve is the vasomotor nerve of the eye and as most of our ocular diseases are fun-

* Read before the Indiana State Medical Association, West Baden Session, Sept. 25, 1913.

damentally a vasomotor disturbance it is well to always examine the nose carefully in all cases of eye conditions where the inflammatory trouble is not traceable to direct infection.

Through the close connection of the sympathetic ganglia, the otic, Meckels, and sphenopalatine ganglia, with the sensory branches of the fifth nerve, especially of the second branch, we can readily understand how any affection which causes a pressure to occur in any part of the middle nasal fossa or in the cells themselves can originate pain in distant parts of the cranium, and with a fairly definite location for that pain, according to that part in the nose which is being pressed on. For instance, if we have pressure in the region of the posterior ethmoidal and sphenoidal cells, our pain is apt to be located at the vertex, in the anterior parietal region, and usually some pressure symptoms over the bridge of the nose. Also in sphenoidal pressure alone the post-auricular is more often complained of. In anterior nasal pressure the pain is more often intra-orbital with the eyes the predominant factor, and nasal stenosis a common symptom in the case.

How does this pressure occur? In many ways. From repeated inflammations a hyperplasia results in the turbinal mucosa, the ethmoidal cellular mucosa and the septal mucosa that will result in points of contact which, forming in the middle nasal walls, do two things: they press on the nerves, and cause stasis of the venous blood in its return to the ophthalmic vein, which cause pain. What are the etiological factors which cause the hyperplasia? Any nasal inflammation, most commonly a coryza, which Skillern claims never occurs without more or less involvement of the sinus, each inflammation predisposing to another, and each one leaving the underlying structure a little thicker than before.

It is fair to assume that inflammatory infections of the sinuses are the result of extended inflammatory action of the nasal mucous membrane, occurring with or immediately following an acute cold, the virulence of which depends on the character of the bacilli chiefly concerned in the infection. For instance, an acute coryza due to the invasion of the influenza bacilli is one of the severest and most dangerous infections. The accessory cavities are invariably involved, not always to the extent of being a special feature, as the conditions may be such that good drainage and ventilation may be maintained during the entire course of the nasal inflammation. If such is the case no special attention is directed to the sinus involvement. However, just as soon as the drainage from the

sinus becomes insufficient to carry off the purulent material, then the sinus involvement becomes the chief factor in the case and requires special treatment for its relief. Why, we may ask, does an invasion of the accessory sinus become our chief concern when infected with some of the more virulent germs, such as influenza, Klebs-Loeffler, pneumococci, etc., or when associated with scarlet fever and measles? Realizing the close relation of the ethmoidal and sphenoidal cells to the orbital cavity anatomically, the close connection and distribution of the blood supply, lymph supply, and the nerve distribution between the orbit and the lateral wall of the nose, can we wonder that a severe involvement of the sinuses, especially the posterior, ethmoidal and sphenoidal, give us considerable anxiety.

The inflammatory diseases of the ethmoid and sphenoid are divided into:

Acute catarrhal inflammation.

Acute suppurative inflammation.

Chronic catarrhal inflammation with hyperplasia.

Chronic suppurative inflammation.

Chronic catarrhal inflammation with suppuration.

Acute catarrhal infection occurs to a greater or less extent with every acute coryza. Resolution occurs more slowly than in the general nasal mucosa. Acute purulent inflammation is generally associated with acute frontal empyema, or may be traced, if arising idiopathically, to some of the infectious diseases such as influenza, scarlet fever or measles. Resolution occurs more readily than in the sinuses proper, due to better drainage from the ethmoid than from the sinuses proper.

The symptoms of acute ethmoiditis are those of a particularly severe cold, almost a complete occlusion of the nose, especially of the superior portion between the eyes; headache constant, with occasional neuralgic offshoots into the eyes; tenderness on pressure; ciliary neuralgia on use of eyes for close work. Diagnosis is generally based on symptoms, as the nasal tissues are so engorged and swollen as not to permit of a satisfactory rhinoscopic examination. This condition can be classed synchronously with cold in the head until such time as the cold has abated and tissues resolve themselves to normal, while the ethmoidal cells seem still to be inflamed. Each attack predisposes to another until chronicity has established itself.

Chronic inflammation of the ethmoid, or hyperplastic empyema with suppuration, is due to repeated attacks of cold and disturbance of

nutrition to cells, with formation of polypoid tissue. The symptoms of this disease are those of a chronic cold with ocular manifestations, headache in region of nasal base, above and below the eyes, radiating toward the temples, not constant, but assuming a neuralgic character at times. Disturbed sense of smell, musty odor or anosmia may be present. Pharyngitis and eustachian catarrh are accompanying affections, and asthma is very commonly associated with chronic catarrhal ethmoiditis. Eye symptoms consist of scotoma, ciliary neuralgia and photophobia.

After the diagnosis of chronic catarrhal ethmoiditis is established no trifling treatment will avail us anything. I have made it a practice in recent years to completely abolish the ethmoidal labyrinth by first removing the entire middle turbinate and then with a punch or some of the various ethmoidal knives or curets to break all the cells into the nose, taking care to round off all fragments of bone, leaving good, smooth edges. Very often it is necessary to open the bulla as well, and in certain cases cut down the uncinate process.

Chronic suppurative catarrhal inflammation exhibits many varied symptoms, depending on the virulence of the inflammatory cause and the ability of the patient to stand punishment. The suppuration generally runs its course without much subjective discomfort. When patients consult us with this trouble it is generally for inflammation of the pharynx and larynx, only in cases of closed suppurative ethmoiditis are the headaches severe and then they are extreme, usually over the root of the nose and on the top of the head.

Rhinoscopic examination shows crusts, particularly around the external nares; middle turbinate hypertrophied, traces of pus visible between it and nasal wall; inferior turbinate often distinctly atrophied; pharyngitis sicca always present in advanced cases; chronic dyspepsia common.

Treatment consists in the removal of the middle turbinate and breaking of structures into the nose, giving drainage and permitting medication to reach site of diseased tissues. Occasionally a patient presents himself with a history of suffering acute pain in some region of the head, more often anterior parietal and occipital, giving history of having had an acute severe cold from which he had recovered. One would expect to find evidences of acute ethmoidal or sphenoidal inflammation. However, on examination one is surprised to find an apparently normal condition of the middle turbinal region, but after thoroughly cocaineizing the middle turbinal region

and applying adrenalin chlorid, with a Killian's long-bladed speculum, we can see the ostea of the sphenoid completely closed and presumably those also of the posterior ethmoidal cells. In several of these cases in which I have been able to enter the sphenoid and posterior ethmoid cells with an applicator on which was wound a thin pledget of cotton soaked in cocain and adrenalin, the procedure has been followed by complete and prompt relief of pain, which causes me to conclude that the pain was one such as we often encounter in eustachian tube inflammation wherein the air in the middle ear has become rarified and a vacuum results, causing drawing or dragging on the periosteum.

On account of the shortness of time which I am allowed in presenting this paper I have necessarily been obliged to omit many of the finer points of diagnosis and of the more obscure etiological causes of these ethmoidal complications. So far, I have sketched only in a rough way a background on which to paint in closer perspective the history of a few cases, illustrative of these various types of troubles demanding surgical interference. While I have in mind the last-described class of cases, I wish to present one or two illustrations of the same.

CASE 1.—Mr. W., aged 50 years, presented himself on March 4, 1913; referred to me by a colleague; had had mild attack of influenza three weeks previously; patient strong and robust. Had completely recovered from influenza, but two days before coming to me had been attacked with acute and constant pain in the anterior parietal region; also some occipital pain. After preparing the nose for examination, I found nothing radically wrong from inspection of middle meatus, where I expected to find either pus or exudate in sphenoidal or posterior ethmoidal cells. I was able, after considerable time, to work my way into both sphenoidal and posterior ethmoidal cells, when a slight pressure caused the patient to cry out with pain in the region of which he had complained. I could not discover any pus or exudate, so washed out the sphenoid with argyrol solution with large syringe and small sphenoid cannula, telling patient to come back next day. March 5, on his return, I found ostea open, no discharge; patient said he had had no pain after a few hours from leaving the office. Subsequent statements in the next few weeks, when I happened to meet him, gave history of no further trouble.

The history of two more cases since then would give practically the same result.

CASE 2.—Mr. B., referred to me by colleague in Robinson, Ill. Symptoms: nasal stenosis, dull pain over root of nose, irritable throat, eyes tender and frequently congested, much purulent

material blown from nose. Middle meatus of both sides filled with polypi and granular tissue. I completely removed both middle turbinates and broke all the ethmoidal and sphenoidal cells down into the nose; treated for two weeks each day with irrigation and application of 10 per cent. and stronger silver nitrate solutions, alternating with iodine and ichthyol. Patient returned home apparently cured. Have seen him twice since, a year having elapsed, and he reports no return of trouble. All pathologic symptoms entirely gone.

Chronic hyperplastic ethmoiditis is by far the most interesting form of ethmoidal trouble with which we have to deal, and one needing most tact in the dealing with our patients, as they come more often than not complaining of everything but the nasal symptoms. The following case is peculiarly interesting:

CASE 3.—Mrs. M., wife of colleague. For several years suffered with general neurasthenia, supposed to be of uterine origin, as she had always been an extreme sufferer during menstruation. Came to me two years ago for relief of headaches and asthenopia. I refracted her at the time and prescribed glasses. This gave her some relief, but patient was constantly complaining of discomfort in the eyes, particularly in the left, especially when reading. Patient was very nervous and frequently had attacks of neuralgic pain, transitory in character, in various parts of the body. Each month had to go to bed for a day or longer and was examined by various men for pelvic disorders, and finally had a curettage of the uterus without relief. At the time I first refracted her I examined the nose and told her that I thought her head pains were largely the result of nasal pressure, but she was obdurate about having anything of an operative nature performed, as she naturally, not having any conscious nasal trouble, could not believe that that could be the cause of her head pains. On April 16 she came in to have me go over her eyes again, as she was in a desperate condition of nerves, which I did without finding any change in the refraction. I asked her to let me go over her nose again, during the course of which I used rather more anesthetic than was necessary merely to examine the nose, and finding the condition there the same, only a greater amount of hyperplasia with more pressure than on the first examination, I called her husband into my office, explained to him that I had the nose in condition to operate, and that I was sure she would derive much relief from operative measures. They gave their consent and I removed the middle turbinate entirely, and finding enlarged bulla, broke it down. She made a prompt recovery from the operation, and, incredible as it may seem, in a few days was a perfectly well woman. Her nervous symptoms disappeared entirely; her headaches were gone, she could do anything and everything that a perfectly healthy normal

woman could do. On her first menstruation after the operation she had no pain at all. This improved condition continued for two months, when she began to complain of the same old symptoms, only in not such an aggravated form. After several weeks of treating her nose and assuring her that she would be all right if she would let me do some supplementary work in her nose, I broke down some of the anterior ethmoidal cells, and again, with punch forceps, removed what was left of the bulla. Considerable treatment was necessary following the second operation, but patient finally recovered herself again, with relief of all symptoms, much to her and her husband's gratification.

CASE 4.—Carl R., manufacturer, aged 33. First saw him in 1907. Complained of nasal stenosis and headache at that time. Removed part of lower turbinates and straightened septum. Patient had been in the hands of competent oculist for several years, so I did not question his correction. Operations on lower turbinate and septum were followed by relief of stenosis, but did not help headache, nor improve his chronic hyperplastic pharyngitis. I saw patient from time to time and treated his throat occasionally. He continued to suffer greatly and increasingly with head pains, indigestion and irritable throat. I urged him on various occasions to let me operate his nose again, explaining to him as understandingly as possible what we hoped to accomplish. It was not, however, until May of this year that his suffering had become so frequent and so intense that he came in asking me to try to give him some relief. I removed both middle turbinates and broke down his ethmoidal cells on the right side, as the nose was very narrow on this side, due to a high deflection of the perpendicular plate of the ethmoid. The pressure in both middle fossae was great, being unable to pass the smallest plectet on applicator either under the middle turbinate or between the turbinate and septum after the most thorough shrinking of the parts. I considered that to open the ethmoid would give him greater ventilation and freedom from pressure on the right side, than to attempt a replacement of the deflection. This was followed by prompt relief from the headaches, and while he is not entirely free from some slight head pain he has not had one hard paroxysm since, and his stomach trouble, of which he complained almost constantly, has almost entirely disappeared. A recent refraction since the operation shows the astigmatism in left eye to have reversed itself from 90° to 180° , which may account for some of the slight headaches he occasionally has had, as since the operation he has been wearing a correction exactly opposite to that which he requires. Owing to the relief of embarrassment to the internal rectus muscles and associated structures, the refraction should be gone over after an intranasal operation of this character.

CASE 5.—Miss E., aged 18, presented herself February 20. Complained that for some months she had suffered rather severe pains in the infra-orbital region and over the root of nose. Complained of nasal stenosis and said that two days before she had lost the sight of right eye. Examination showed a greatly enlarged uncinate process, with extreme hyperplasia of middle turbinate, considerable deflection of ethmoidal portion of the septum, the whole forming a tight pressure mass in the middle meatus anteriorly. Examination of the eye revealed considerable retinitis, with disk completely obscured on nasal side; also engorgement of retinal veins. No amount of cocain and adrenalin would shrink the turbinal tissues sufficiently to make a comprehensive examination. I felt satisfied, however, that the trouble was entirely in the nose, and by main strength and awkwardness removed the middle turbinate, at the same time chiseling down the uncinate process. After several days, when the field of operation had cleared up enough to enable me to examine the ethmoidal region carefully, I found a much enlarged bulla and a great deal of tenderness over the bulla and anterior ethmoidal cells. I proceeded to break these down and subsequently in the process of healing got considerable suppuration, although I could not demonstrate at the time that there was a suppurative condition of the cells. I do not think, however, that this was due to operative infection. The patient's vision after a few days began to clear up, and whereas she had only light perception when I first saw her, in three weeks' time her vision had returned to normal and her pain had entirely disappeared.

DISCUSSION

DR. L. C. CLINE, Indianapolis: It is almost impossible to discuss this paper in a comprehensive manner, as I did not know until a few days ago that I was to open this discussion, and therefore have made but little preparation. What I wish to call attention to particularly is that I believe that there is an immense amount of operating done that is absolutely unnecessary. I don't doubt that the Doctor's cases were those that called for operation, but I believe that if we would send some of these patients to West Baden or French Lick and put them through a course of baths and give them some alternative, many of them would not need operation at all.

I am sorry to say that many of our rhinologists seem to be simply in practice for commercial purposes, and everything requires an operation. I tell you, gentlemen, we need less operating and more general treatment; more attention to general internal methods. We should observe these patients a little time. I have learned this by actual experience. I used to cut a good deal, but I don't operate half as much as I formerly did.

I think Dr. McCall will remember a case that happened at Terre Haute several years ago. The patient came to me with a mastoid trouble and some nasal trouble. I treated him on the expectant plan, and told him I was afraid he would have to have an operation. This was in the summertime, and in a few days I was starting on my vacation when I met him at the railway station. He said to me: "Doctor, I am coming to your office; I am in great distress." He had a cloth tied around his head. I looked at his ear, and it was all black and blue back of the ear. I told him he would have to be operated on, and that as I was going on my vacation he had better go back home and see Dr. Williams. The man had fever at that time. He did as I advised, and Dr. Williams told me that he called in two doctors in consultation and they decided not to operate, but put him on large doses of iodide of potassium, and the condition began to improve. I have seen other cases do the same thing. I have seen many cases of nasal trouble, where it seemed as if operations would have to be done on the turbinated bodies, where pus was flowing down from the ethmoids and sphenoids, and yet improvement took place under local and systemic treatment. I remember one case in particular on which I did not want to operate. I put that case on hydriotic acid and iodine, with eliminative treatment, and the patient got well without operation.

I am satisfied that we operate too much, and that we destroy too much of the nose. Of course, in some cases operation is absolutely necessary, as in the Doctor's cases, where nothing but an operation will relieve the tension and pressure. I believe in operating when necessary, but we have been doing too much unnecessary operating. We have not done enough of the general internal and external cleansing. We have not paid enough attention to eliminative and alternative treatment. I think we should preserve the nose in every particular that we can. When we interfere with the anatomical construction and the physiological function of the nose we are likely to get into rather than get out of trouble.

DR. G. W. SPOHN, Elkhart: I like Dr. McCall's division of these cases into acute and chronic, and his treatment of the acute cases. If I understood him correctly, his treatment of the acute cases is purely topical or palliative, and looking toward the general condition of the system. I like that method and believe, generally speaking, that those cases do not need any operative work ordinarily. I do not believe any one here would operate on an acute case of ethmoiditis, or acute inflammation of any of the sinuses unless there was some special indication for it. I believe that all we can do in this as well as any disease is to assist Nature.

The question naturally arises, What causes these conditions of the sinuses? Dr. McCall gave a history of one case of stenosis of the meatus of the sphenoid. When he dilated the meatus the

headaches disappeared, and the patient became well, and yet he found pus there. That is a common thing. In a great many cases we have the meati of the sinuses closed, or almost closed, and, naturally, with a pent up discharge—even if it is not pus—in that cavity, it would cause some disturbance and be relieved as soon as drainage is established.

Now, getting back to the etiology. It has been my experience in over twenty years in this line of work that these cases are almost entirely caused by the depression of the septum, one way or another. I cannot believe that the rhinologist is over-operating so much as is generally claimed. There are a great many pseudorhinologists who are doing work that should not be done, but I don't believe we have any of them here to-day.

If a person would all through life breathe through the nose it is my candid opinion that he would have very little sinus disease—practically none of it. If the roof of the mouth arches too much and the sinus is drawn to the right or left, we are going to get trouble. We must have trouble there. The meati of the sinuses will close. If they are not closed we will not have any trouble, because capillary attraction will drain the secretions, and that is all that we want. And it is also my belief that we will not have trouble with any of the accessory sinuses of the nose unless we have a deviation of the septum. The large majority of these cases can be controlled (at least, this has been my experience) if you do a submucous resection and give the proper drainage to the sinus without cutting away any bone, unless the case has gone on so far that we have a case of empyema accompanied by a necrotic condition of the bone. Then I agree with the essayist that we must curet all of the ethmoids, or whatever sinuses may be involved.

I perform submucous resection many times. You cannot injure the nose if you do it properly, and you give the patient good breathing, in the large majority of cases. I believe that if we give drainage to the sinus that is all that is necessary, unless it be in cases where we have necrotic bone and the system has been so impregnated with the toxins from the disease of years' standing and we have a constitutional condition. I can't cure those cases like some of you men can. I have had them for ten and fifteen years. I have gone into the ethmoid and cleared everything up; I have gone into the frontal sinus, into the antrum, into the sphenoid and cleaned up all the cavities, and yet there is a catarrhal condition. I am experimenting at present with a smoke laden with eucalyptol, and have had better results than with all the caustics or anything else. When you say you can cure these old necrosis cases in one operation by clearing them out, I would like to know your methods. I cannot do it. I believe in operation in the nose as much as anybody. I don't

believe, as Dr. Cline says, that the rhinologist is doing too much. I believe, if necessary, we should first do the submucous resection, because you cannot injure the nose, and afterward, if necessary to relieve the patient, take the lower turbinate out, but not otherwise. I take out the turbinated bodies, if necessary, but before doing so I take the measurement of the nostrils to find out how much space I have. This should be measured mathematically, so that we will know how much space the patient requires and how much space we have. As long as patients breathe through the mouth they will have discharge from the sinus, and it cannot be stopped. I would like to emphasize just that one thing.

To repeat: Do all the surgery in the nose that is necessary to get air for that patient, and see that the patient always breathes through the nose—never through the mouth. Lastly, I believe that the rhinologist should understand general medicine, and should prescribe generally.

DR. H. C. PARKER, Indianapolis: Unfortunately, I did not hear all of the paper, but I heard enough to remind me of some things, and I want especially to emphasize the point he brought out, namely, that after an intranasal operation of any magnitude the refractive condition of the patient should be thoroughly gone over. I have seen a multitude of cases where unquestionably the refractive condition has changed markedly following the intranasal interference. And until the necessary change is made in the correcting lenses the individual will continue to suffer symptoms of asthenopia.

I want to state briefly a case of ethmoid involvement that came under my observation seven years ago, to show how far-reaching the general effects of this disturbance may be on an individual. This patient came to me after having been examined in four or five years by a number of men in this country and abroad, who all insisted that he had syphilis, because of the fact that he had a constant diplopia. There was no paresis, but a constant diplopia. It was an esophoria of about 18 degrees. He was myopic and had been told by a physician in Philadelphia, who made a specialty of ophthalmology, that he had one of two alternatives: one was to go abroad and seek the best advice possible there; the other was to give up a very lucrative practice and go out on a ranch. He chose to go abroad, and there was treated antispecifically, without avail. He noticed, however, that in the Alps he was much better. My interpretation of that is that his rhinological condition was so much improved on account of the high altitude that he obtained relief in that way. When he came to me for examination I found a very high myopia, and said I would not do anything until he consulted a rhinologist, who reported to me that he would require an operation. He removed the anterior ends of the middle turbinates, which were very

large; thoroughly curetted both anterior ethmoid cells, with the result that the patient's diplopia absolutely disappeared. By the way, I neglected to say that in two different places, one in this country and one abroad, a diagnosis of general paresis had been made. His condition was entirely relieved by a perfect exenteration of the diseased ethmoidal cells.

I know of two cases of glaucoma that were entirely relieved by removal of the anterior ends of the middle turbinal bones.

DR. W. N. SHARP, Indianapolis: I am not a rhinologist, an otologist or a laryngologist, but I simply rise to ask a question. Dr. McCall has stated that after doing an intranasal operation there was a complete change in the axis of astigmatism, and Dr. Parker has also stated that there was a change in the axis of astigmatism following the operation. The question arises, was that a corneal astigmatism or a lenticular astigmatism? If it was a corneal astigmatism, what, under Heaven, was the cause of the change in the axis of astigmatism?

DR. L. D. BROSE, Evansville: I would like to speak of the cases in which there is more or less watery discharge from the nose. On examining the nose you find a condition due to polypoids—the nostril blocked with them. You exenterate the anterior ethmoidal cells. The patient goes away and feels very much relieved; he breathes through the nose for a year, perhaps two, and then comes back with the same condition, and again you do a little more operating. Those are the cases that require the most attention. Also another class, which is another of the chronic varieties, where you have shut-off cells, with no drainage. The cells become diseased, and you get all manner of reflex symptoms—reflex symptoms in the abdominal cavity—vertigo, and those are the cases in which you have to do a good deal of operating.

DR. J. O. STILLSON, Indianapolis: I find that we sometimes change our views if we live long enough and have enough work to do. I used to fight this operation practice tooth and nail. For many years I thought that the nose men were butchers. But I have seen some operations on the turbinates that have opened my eyes, and have proceeded to make some operations on my patients that have opened their eyes. The fact is, whatever is necessary to be done should be done—I don't care if it is giving a dose of medicine or removing the tonsils. I have made a good many operations on the turbinates, and I do not recall any of them that ever came back to me complaining, thinking that the operations were unnecessary or that they did not give relief. That is saying a good deal, I must admit, but I have been very careful to be secure and on my feet before I suggest the removal of the turbinates. Early in my practice I did use the

cautery, but I always was ashamed of it. My rule has been to convert mouth-breathers into nose-breathers. I do that first.

I think the whole question narrows itself down to this: To understand your case, know your business, and then go ahead and do the necessary work conscientiously.

DR. WILLIAM S. TOMLIN, Indianapolis: I think that the ground taken by the essayist regarding operative procedures is really a conservative one. Some of the discussers are advocating to some extent conservatism along one line, and I would follow the line that has been advocated by the essayist, along the other. The opinions of others are of just as much value as our own, and it is only by discussing and exchanging ideas that we may improve.

I would call attention especially to, and would like to make a slight verbal report of, three cases that I have had in the last few months, where it had seemed to me that an operation would be necessary on account of the subacute or somewhat chronic suppurative ethmoiditis. I found in these cases that it would be necessary, before I could make an exenteration to my liking, that the septum be straightened, and not desiring to make the two operations at one time, as I sometimes do, I did a submucous resection in each of these cases and straightened the septum, and, much to my surprise, in the first case, less so in the second, and not nearly so much in the third one, the drainage thus obtained by the submucous resection caused general improvement in the general health. The ability to breathe better increased the salutary effects of the internal medication, and the ethmoiditis cleared up. So that I am of the opinion that unless there is an actual necrosis of the bone in the ethmoid cells we should look very carefully to see if there are not points in the lack of ventilation that may be corrected by straightening the septum and giving the patient the advantages that he may get with better ventilation. A full recovery may result without a free exenteration of his nose. We know that in these cases of free exenteration, while the patient does become more comfortable, there is always a little excessive mucus that drops from the nose, which is always a source of trouble, notwithstanding the fact that the suppurative process has been entirely relieved. I speak rather feelingly on this subject because of having had some personal experience along that line. I advise my patients that if they have a suppurative condition of the nose, it is a foul and nasty condition, and one can do no better than have any reasonable operation performed that will give relief.

DR. GEORGE F. KEIPER, LaFayette: The point I desire to make is that there is a rational

surgery as well as a rational therapy. If, on looking into a nose, we find pus oozing from somewhere, it is just as much our duty to get rid of the cause as to get rid of a pus tube, and, if necessary, an appendix that is in the same condition. We must not overlook the fact, also, that a frontal sinus may empty into an ethmoidal cell and be the cause of trouble. And so I think that we do not do our full duty to that frontal sinus until we get drainage for that. Of course, very often it is necessary to destroy an ethmoidal cell in order to get into the frontal sinus and relieve the trouble. I mention that because I have not heard that brought out in the discussion.

DR. MCCALL (closing the discussion): I will answer Dr. Sharp's question first. I think that we will find that where we have an enervated or interfered with external rectus muscle, due to an extended inflammatory condition through the nasal walls from the ethmoidal cells, we will have a condition of esophoria for distance and exophoria for near. It is due to the inflammation in that muscle and pull on the side of attachment. This to some extent flattens the cornea in that axis, and as soon as the muscle returns to its normal condition this lessens the lateral pull on the eye and we get an astigmatic axis of 90 degrees, all due to the release of the pull on the eye.

I hope I have not given the impression that it is my custom to operate on the middle turbinates of every patient who comes into my office. I thought I made it plain that the cases I cited, and under the conditions which I deemed it advisable, were those which had resisted treatment of all kinds, and had been in my hands long enough to demonstrate the fact that the treatment was not doing any good, and would not.

So far as Dr. Spohn's remarks on the straightening of the septum are concerned, I have not found it satisfactory in many cases to do merely a resection or a septal operation where the deflection was high. Where the deflection is low, it is very nice, but where the deflection is high it is very hard to do a satisfactory submucous resection of the ethmoidal plate. I don't think it can be done nicely without more harm than good when the deflection is situated high up. Besides this, it is a dangerous field in which to operate.

As Dr. Stillson says, I too have had no patients come back complaining that they were greatly injured by the removal of the turbinate. They will sometimes say there is some catarrhal condition resulting from it, but that is preferable to the condition first found. I can conscientiously say that I never remove turbinates that I do not feel are diseased.

DR. G. W. SPOHN, Elkhart: With reference to submucous resection, Dr. McCall said that if

the deflection was high up he did not have good results. I would like to ask him if he leaves the deflection high up? There is no need of leaving it that way. It can be straightened as well as when it is low.

DR. MCCALL (answering Dr. Spohn): I will confess that in a number of cases I have left it when it was high. I have removed the middle turbinate to get relief of breathing instead of trying to relieve the deviated septum.

OCULAR NEURASTHENIA *

JOHN RAY NEWCOMB, M.D.
INDIANAPOLIS

Neurasthenia, the *bête noir* of the American people, has, during the past decade, received a vast amount of attention, much actual study and as much theorization as to causation and termination, as has any other non-infectious bodily disorder which has arisen as a by-product of our overzealous educational stampede and our intensified mode of living.

Nearly every department of medicine and surgery has appropriated unto itself the obligation of determining the most frequent etiological factor in the production of neurasthenia. At the feet of nearly all the specialties has been laid the blame. The gynecologist has been appealed to in a great majority of cases. The genito-urinary surgeon has well established the belief that sexual disorders are by all means the most potent of all the productive factors. The neurologists have inclined to the possibility that after all neurasthenia might be a distinct and definite nerve disorder not necessarily dependent on physical derangement elsewhere. The rhinologist, the otologist, the proctologist, in short, all men in all branches, have found cases which clearly depended on disease or disorders in that particular part of the anatomy in which they are extraordinarily interested and skilled. From all branches of medical science have come numerous reports of cases which were cured by treatment applied to some particular part of the body. The multitudinous number of existing cases, the variety in the index of etiology, all go to show that neurasthenia is protean in its cause and in its effect.

Admitting that all that has been claimed is true in regard to cause, treatment and cure of neurasthenia, there yet remains a large number of cases which are not cured, and the etiology of which is obscure. It is not my claim that ocular disorder or ciliary strain will explain these obscure cases in every instance, but it is my

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purpose to show that ocular neurasthenia is an important, definite type of neurasthenia, very frequently overlooked and not appreciated in its full significance.

I shall consider only those cases in which an error of refraction exists, not considering the anomalies of the extrinsic muscles nor diseases of the eye as etiologic factors. The cases reported were referred to me because of the nervous manifestations exhibited and an analysis of the ocular errors, the symptoms produced thereby and the results obtained will, I hope, convince you of my contention that neurasthenia is in many cases the result of eye-strain. I feel that experience will bear me out in my statement that eye-strain is one of the most frequent causes of neurasthenia, and that no case of neurasthenia will fully recover so long as an uncorrected error of refraction exists.

With the refinement of the technic of examination which has come about in the past few years, it is now possible to discover and cure these cases which heretofore were not diagnosed, but were turned away with the statement that the eyes were normal. A searching examination is always necessary in these cases because of the fact that the low degrees of error are more prolific of nervous manifestations than are the gross errors. The fact that a patient has normal vision at twenty feet is frequently accepted as a proof that the patient's eyes are normal, when in reality it is proof, in many cases, that an abnormality exists.

An eye examination was omitted in more than one of the cases which I report to-day, because of the fact that vision for distance was normal and there was no history of frontal or supra-orbital headaches. In my opinion nervous irritability, nervous depression and a loss in power of concentration are as definite indications for examination as are headaches, palpebral irritation or any other of the common symptoms of strain.

It might be well at this time to outline the routine examination made in these cases. The patient's history is first carefully recorded, all direct eye symptoms being noted and all nervous manifestations being brought out by painstaking questioning. After completing the history, the vision at twenty feet, without lenses and with lenses if the patient wears a correction, is recorded. The tension in each eye is measured and all abnormalities are noted. Without any attempt at trial case correction the cycloplegic is instilled. This in all cases, except those of pronounced ciliary spasm or hypertrophy, is

homatropin et cocain aa Gr. 1/50. It has been my experience that one ophthalmic disk of the above strength is sufficient in the majority of cases, producing complete cycloplegia in one-half hour. With complete cycloplegia the ophthalmoscopic and retinoscopic examinations are then made.

The retinoscopic examination should be made in a light-tight room if low degrees of astigmatism are to be observed and corrected. A hurried, careless retinoscopic examination is worse than none at all, and I believe that the success or failure of the examination is determined by the refinement of technic of the retinoscopist. My experience with this method of examination leads me to state that it is absolutely reliable, and that retinoscopic findings are of more value than all others and should determine in practically all cases the prescription for the patient. Having concluded the retinoscopic examination, physostigmine in sufficient strength is instilled to restore the ciliary muscle to its normal activity.

The post-cycloplegic examination is begun with the determination of the balance of the extra-ocular muscles with the phorometer. Following this the full retinoscopic findings are placed before the patient's eyes and a verification of the astigmatic axis is made. In not one of the cases reported did I vary from the full retinoscopic findings. The subsequent reports from these patients are sufficient proof of the wisdom of full retinoscopic correction.

Of the utmost importance is the full correction of the astigmatic error, I have found that twelve one-hundredths of a diopter, uncorrected, will frequently thwart all attempts at relief. In these cases of ocular neurasthenia it has been my observation that the low degrees of uncorrected astigmatism are most important in etiological significance. There is no doubt that the muscles of accommodation will quickly become cognizant of the futility of attempting to correct gross errors of refraction. There is therefore no undue ciliary contraction, no increased innervation necessary and no resulting reflex discomfort occurs. However, with the low errors there is continuously a contraction of the ciliary muscles, sufficient to bring the deficient vision up to normal. This compensatory muscular contraction is often kept up for months or years before the vicious results of ciliary strain are observed and very frequently the nervous manifestations are the first to be noted. There are none of us who have not had patients whose only complaint was a lack of ability to concentrate, asso-

ciated with a vague sense of irritability and unrest. With these patients we find, frequently, normal vision for distance, no direct eye symptoms, and not until we have made a careful retinoscopic examination do we find the low degree of error which in most cases is present. Let this condition of strain continue and it is not long until our patient is on the border of a mild neurasthenia which is limited in its increase only by the patient's mental and nervous stamina.

Next to the uncorrected errors of refraction, the most frequent factor in the production of ocular neurasthenia is the vicious over-correction which I have found is almost universally the mistake of the opticians, or self-styled optometrists. To dwell on the mistakes of these gentlemen would be productive of a voluminous manuscript. To dismiss the subject briefly, I think it is no exaggeration to state that ophthalmia neonatorum is less productive of serious injury to the eyes than is the guesswork of "EYES TESTED FREE."

The pathology of the symptoms which are observed is vague but nevertheless real. There can be no doubt of the establishment of a vicious circle of symptoms nor can it be denied that a profound psychic depression may actually exist, but to trace the manner of production of the various psychic symptoms necessarily involves us in theoretical speculation. With an ocular physical imperfection of sufficient magnitude to produce functional interference there occurs a compensatory effort at functional reestablishment. In cases of eye-strain this compensation is muscular, involving continuous increased innervation. The pathology of the reflex eye-strain symptoms may be dependent on long-continued hyperinnervation, muscle fatigue poisoning or vasomotor disturbance, or it may be due to a combination of all three. Deeper study than has been given the subject will be necessary before a definite pathology is decided.

In the cases which I have observed I have found the types to be of three varieties. They may exist separately or may be blended. Ocular neurasthenia presents symptoms which primarily reflex, soon become psychic in character, later developing frequently into the psychoneuropathic. First, we have the stage of nervous irritability, which is soon followed by an indefinite sense of depression, which, unless relieved, assumes more pronounced dimensions. The depth of this depression may become so great that the patient will be morbid in thought and action, as will be shown later. This symptom complex may be associated with some of the

frequent eye-strain symptoms or may be found alone. As an example of the type of ocular neurasthenia in which there are no direct ocular symptoms, I present the following history:

Case No. 1.—Illustrating the psychic-depression type in which the patient exhibits the painless headache described by Dr. C. P. Emerson as "psychic depression which is the equivalent to the headache."

R. S., Knightstown, Ind., Feb. 8, 1913.

History.—Age, 10 years. Nearly every afternoon Richard comes home from school and after putting away his books he lies down on the day-enport and cries. He will cry from fifteen minutes to nearly two hours. He never complains of headaches, his eyes do not hurt and he cannot tell why he cries.

This history, given me by the mother, was verified by the boy. On questioning I found the boy was not supersensitive, his feelings were not easily hurt, his work in school although poor was not a source of worry or mortification and he could give no reason for crying. This crying was not of the hysterical type in any sense of the word. No source of physical irritation could be found. He rests well at night but frequently has bad dreams, the same dreams frequently recurring on successive nights. With the exception of nervous irritability and inability to concentrate there were no other symptoms available. On examination the boy's vision was found to be normal, both fundi normal, and no objective signs of significance. Homatropin was not used, as I have found it inefficient in children under 14 years of age. Therefore he was given a prescription for a 1 per cent. solution of atropin sulphate, to be used twice daily for four days. The subsequent examination revealed a low grade of mixed astigmatism, for which the full retinoscopic findings were prescribed for constant use (O. D. — 0.12 \odot c + 0.37 ax 90°. O. S. — 0.25 \odot c + 0.37 ax 90°). One month of constant use of lenses resulted in total disappearance of all symptoms, and the boy's teacher had reported marked improvement in his school work. At the present time, practically eight months since the day of examination, there has been no return of the symptoms.

The second case I wish to present is one of ocular neurasthenia associated with direct eye symptoms. The case history of the patient is the following:

K. McK., Indianapolis, Ind., April 30, 1913.

History.—Aged 18 years. Physical condition is good. Family history is negative. The following symptoms began about three years ago: Patient complains of attacks, beginning with

feeling of depression, after which a nervous headache (supra-orbital) comes on, followed by an attack of crying. Depression lasts about an hour, headaches may last all day, and crying usually lasts about forty-five minutes. Headaches usually start in the evening. No vertigo. No carsickness. No floating sensations. During menstrual periods these symptoms are increased in severity. Attacks are of almost daily occurrence.

In this case nervous manifestations are purely those of depression. There was no irritability at any time.

The third case is a combination of the usual eye-strain symptoms with both nervous irritability and depression.

Mrs. J., July 28, 1913.

History.—Has worn lenses for two years. Now complains of checkrein sensation which is increased after close work. Insomnia. Sleep is disturbed by dreams of unpleasant nature. Extreme nervous irritability, which has been increasing for months. Periods of extreme depression. Feels unworthy of responsibility of raising her child. Has expressed on several occasions the wish that she might die. Facial expression is one of anxiety and despair.

From a letter received three days after examination the following are extracts: "I felt pretty good the evening I came home, and slept without medicine that night. Until Tuesday noon my nervousness seemed better, but since then I have been terribly depressed. I feel that I am on the verge of collapse. I can't interest myself in anything. I feel that I can't stand this depression much longer. I can't seem to control my feelings."

Under date of August 7 the patient writes: "My nervousness seemed to quiet down gradually until to-day, when for a few hours the depressed feeling was as bad as ever. I am sleeping some at night without any medicine, but I still dread even the thought of lying down in the daytime. I realize I am a very poor soldier in this fight, but I don't seem to get a grip on myself."

On August 28 the patient reported improvement in all symptoms and stated that the periods of depression are of brief duration and less frequent, and that the depressed feeling arises from the fear that the old trouble will return. This case is reported to show the condition which may possibly arise from a simple eye-strain. In this patient we have both nervous irritability and psychic depression, accompanied by some of the usual eye-strain symptoms.

As an example of the early stages of an ocular neurasthenia I cite the following case history:

Miss M. N., Indianapolis, Jan. 18, 1913.

History.—Has worn lenses for several years. No other available ocular history. The usual amount of close work makes her head feel as though there was an iron band around it. There is a feeling of weight directly on top of head.

This patient was given the usual examination and full retinoscopic findings prescribed. Her improvement was apparent after ten days' use of lenses, and at the end of three months all trouble had disappeared. Had the patient's ciliary strain been unrelieved it would have been but a short time until the more advanced symptoms would have been presented, and the psychic depression and nervous irritation would have become apparent.

These four case records are illustrative of the neurasthenia arising from errors of refraction. These cases I have found are of frequent occurrence, and my records contain many more such histories. To recite them would be but a repetition of the four I have presented.

In conclusion, these points I wish to impress on you:

First, neurasthenia may be caused solely and directly by eye-strain.

Second, that this eye-strain will be of low degree in the majority of cases and may have given rise to no direct ocular symptoms.

Third, that the retinoscopic examination is of paramount importance and the retinoscopic findings should be unaltered in the writing of the prescription. The retinoscope furnishes the only objective test, and no subjective test applied to a neurasthenic holds any value.

Fourth, that all cases of neurasthenia should undergo an ocular examination under cycloplegic for the reason that a neurasthenic, suffering from eye-strain, will not recover so long as that source of irritation remains.

DISCUSSION

DR. A. E. BULSON, JR., Fort Wayne: Mr. Chairman: Sixteen years ago I presented a paper before the Western Ophthalmological Society, at St. Louis, in which I called attention to the fact that moderate errors of refraction are often responsible for a train of nervous symptoms and discomfort which are not relieved except by the adjustment of the weak lenses that are indicated. I distinctly recall that the ophthalmologists who discussed the paper took a rather skeptical view of the subject, and that about the only one who fully substantiated my position was a neurologist of some note who had had some experience with the very class of cases that I reported.

My opinion concerning this subject has not changed, and it has been exceedingly gratifying

to me to note that within recent years a large number of papers have been presented before our leading medical societies, by competent observers, in which has been reiterated what I had previously offered, and what others before me had offered, concerning this important subject. All of the more recent text-books on ophthalmology, and more especially the text-books on nervous and mental diseases, recognize the importance of moderate errors of refraction, and in particular low grades of astigmatism, as a causative factor in the production of a varied train of nervous symptoms. But the subject does not receive from the average physician the consideration that it deserves, and it is therefore exceedingly appropriate for us to discuss it here, and I wish to compliment the essayist on his choice of subject, as also the concise and clear manner in which it has been presented.

The term "neurasthenia" is used to cover a multitude of vague and indefinite symptoms, yet I believe that it is the consensus of opinion that the term is properly applied to a group of symptoms resulting from some functional disorder of the nervous system, and is due to prolonged and excessive expenditure of energy of some kind. There are many causes of neurasthenia, and I am not inclined to believe that the eyes produce a larger number of cases than anything else, though I do know that the essayist is quite right in assuming that the number of cases due to ocular disorders is larger than generally supposed.

De Schweinitz has well said that many instances of remarkable nervous disturbances are associated with heterophoria as well as with refractive error, and cure has followed the relief of the ocular difficulty, but I believe with him that it is unfortunate that the whole matter has not always escaped exaggeration. In a certain percentage of cases hysteria and malingering have not been eliminated, and the force of suggestive therapeutics has not been taken into consideration. I recall a case of severe mental depression, with loss of energy, disturbance of digestion and other symptoms, which was reported as being perfectly relieved for a period of a year by no other treatment than the wearing of glasses, and an inspection of the lenses disclosed the fact that they were absolutely plain, there being not even the suggestion of a prism. It is very evident, therefore, that there is a neurotic basis for many of these cases, and that while spectacles are not a panacea, yet they may serve a useful purpose, either with or without other treatment.

I am not disposed to give the entire credit to lenses as weak as one-eighth of a diopter for the cure of many of these cases of neurasthenia, though I do think that errors of one-half diopter, and particularly astigmatism of this amount,

especially when the axes are off from the horizontal or vertical, are a prolific cause of disturbance, and require correction before relief is obtained. I seriously question whether relief could not be obtained by other measures, possibly with suggestive therapeutics, in those cases in which the static refraction is found to be less than one-quarter diopter.

I wish to compliment the essayist on his insistence that refraction work should be done exhaustively, and by the aid of careful retinoscopy. In my judgment, the prescribing of glasses without the aid of a retinoscopy done under full cycloplegia is mere guesswork. Without cycloplegia and retinoscopy you may stumble on the right thing, but as often you fail to do so.

I am disposed to take issue with the essayist on the statement he makes that he obtains complete cycloplegia in one-half hour from the use of one disk containing 1/50 grain homatropin and a like quantity of cocain. My experience, and the experience of many other observers whose conclusions have been published, is that homatropin to be effective in producing cycloplegia must be used at least four times, and preferably six times, during a period of an hour or an hour and a half, and in no less doses than those recommended by the essayist. Even then a considerable number of cases will fail to show complete cycloplegia, and this can be definitely proven if the patient is placed under the effects of atropin, which is considered by everyone more trustworthy. I venture to say that within the last six weeks I have had no less than six or eight cases that have shown retinoscopic findings entirely different under atropin than the same cases showed under the use of homatropin in a far more thorough manner than has been advocated by the essayist. These cases were not those which showed any indication of spasm of the ciliary muscle, and they apparently accepted the findings under homatropin. I am sure that I am not alone in the assertion that one application of 1/50 grain of homatropin and 1/50 grain of cocain will not produce full cycloplegia in a very large proportion of refraction cases, and certainly not within the half-hour period mentioned by the essayist. Without complete cycloplegia the retinoscopic findings should be questioned.

The propriety of prescribing the full retinoscopic correction depends entirely on the distance used by the examiner in estimating reversal of the shadow. The personal equation enters into this question, but in general it may be stated that it usually adds to the comfort of the patient and accomplishes the purpose if the lenses prescribed are slightly less than the retinoscopic findings.

With this latter exception, I can fully endorse all that the essayist says in summarizing the points in his paper. Especially do I desire to

emphasize his statement that retinoscopy furnishes the only objective test worth considering, and that no subjective test applied to a neurasthenic holds any value. To attempt refraction work without the aid of a trustworthy retinoscopy done under the effects of complete cycloplegia is to do inaccurate work, and, in a large proportion of cases, unsatisfactory work.

DR. GEORGE F. KEIPER, La Fayette: I want to congratulate the doctor on bringing this subject before us. If we will look over the literature of the subject we will find that very few papers have been presented before scientific bodies of this kind on this subject, or even have appeared in the literature. For instance, if you take the files of *The Ophthalmic Record*, you will find one article since that journal was started. Or if you take Jackson's year-book on the eye, you will find an occasional reference to a review of an article on this subject, and yet it is very important, because these are cases with which we are frequently coming in contact.

What is a neurasthenic? As I take it, it is a person who has an abnormality as to fatigue, and because of that fact he will show certain characteristics; for instance, in taking the field of vision. This was not mentioned by the doctor, but I wish to recommend it in these cases as a valuable method of diagnosis. They will show the contraction of the field of vision more and more as the examination proceeds, getting the spiral form. Of course, there are some cases of hysteria that get it, we will admit, but you are more likely to find it in a case of neurasthenia than in the case of hysteria.

The eye depends very largely for its weal or woe on the weal or woe of the system in general, and so I have made it a rule that when I am looking at the eyes I try to look through the person and see what accounts for the eye trouble.

Dr. Bulson expressed his doubt that one-twelfth of a diopter would have any effect, and that its correction would relieve the symptoms of neurasthenia. The probabilities are that if the person had this corrected at the time of making the examination, or very soon thereafter, the one-twelfth of a diopter would not make very much difference. And yet I call to mind a case in which I corrected one-twelfth diopter, with astigmatism, axis 90 degrees, and gave absolute comfort to that patient.

I want to call attention also to the use of complete cycloplegia, and to commend the essayist on his use of it. But when he speaks of getting complete cycloplegia with 1/50 homatropin and 1/50 cocain, I wonder how he would know whether he had complete cycloplegia or not. We are liable to be fooled, so far as that is concerned.

I notice the doctor speaks of esophoria and exophoria, but has nothing at all to say as to the

strength of the muscles. That should be very thoroughly examined in these cases.

DR. G. W. SPOHN, Elkhart: I have had the same experience with cycloplegics that Dr. Bulson has had. I am obliged to use more, in fact, possibly more than Dr. Bulson has mentioned. I have found during the last year or two that I have had better results, and made the same experiment that he did. I tried the homatropin, and used atropin in adults—never in children—and I found that I did not have a cycloplegia at all in many cases when I used the homatropin, even going as high as eight tablets in the eye, and left them in from ten to fifteen minutes. It depends on the person.

I enjoyed the paper very much, but there is one thing I would like to ask, and wish the members would help me out. A case came to me some two years ago, a boy of 17, suffering with neurasthenia, and it has bothered me a great deal. Perhaps the neurasthenia does not come from the eyes, and yet the case has been gone over by two or three splendid general men, and they find no trouble. Excellent history on both sides of the family, and nothing apparently the matter with the boy. Yet every time this boy studies or starts to school he begins to have a pruritis, and yet you can see nothing on the skin whatever, but he itches all over, as he says, and he cannot sit still in the schoolroom. He is not troubled with it at all in the summer, but as soon as he starts back to school it begins again. If any of you members have had any experience with cases of this kind I wish you would help me out. This boy has only a few degrees of exophoria. He has been refracted three times, and I could find nothing but 1/4 of a diopter, axis 90, in each, with a sphere of 75. I first put a sphere on to full correction; then reduced that. The astigmatism is corrected entirely. And still no progress has been made, and the boy is in just as bad condition as before. He can stop the itching with resorcin, but he must use this twice a day, and he does not want to keep that up all through school.

DR. F. C. HEATH, Indianapolis: One thing in the doctor's paper that surprised me a little was the statement that after the use of the cycloplegic he used physostigmin in sufficient quantity to restore the power of the muscles. I wish he would tell us how much physostigmin it would take to restore a muscle which has been paralyzed for the time being by a cycloplegic. I made the attempt years ago, and found that the action of atropin, or even of homatropin, was so much stronger in this direction than the physostigmin was in the other direction, that I failed completely.

When I saw this subject on the program—"Ocular Neurasthenia"—I confess I was misled.

I thought the doctor had given us a new nomenclature for something which had been described in text-books as neurasthenic asthenopia. Some of the text-books classifying asthenopia as muscular asthenopia and neurasthenic asthenopia. Of course, what the doctor has given to-day is none of those. The asthenopia is not due to any error of refraction, but is only a part of a general neurasthenia, in which you have to exclude nerves of refraction and muscular spasms, except as they could cause a general neurasthenia. What the doctor has given us is really neurasthenia of ocular origin, neurasthenia particularly as a result of eye-strain from errors of refraction.

I recall that quite a number of years ago there was a very extended discussion among the oculists of this country as to whether we get any real effect from lenses as weak as $\frac{1}{4}$ of a diopter cylinder or $\frac{1}{2}$ of a diopter spherical, and there was quite a difference of opinion on the subject, and I think it was Dr. Henry Gradle of Chicago who expressed the opinion at that time that we got no effect from $\frac{1}{4}$ diopter cylinder or $\frac{1}{2}$ diopter spherical, except a psychic effect, as mentioned by Dr. Bulson. I think suggestion is a very important part of the treatment in these cases. If we have a condition of true neurasthenia, it is not cured unless we add to the other treatment a psychic treatment.

DR. J. HEITGER, Bedford: Gould says that it has never been known that an absolutely perfect eye exists. Some persons may have eye-strain with no symptoms at all from it, and it is a question in some of these cases whether the eye-strain can be the sole cause of the neurasthenia. There must be something else back of it, and in some cases it may be the general fatigue that Dr. Keiper mentioned.

A number of papers on this subject have been brought before special societies during the past year. Dr. Haskins presented a paper on these conditions associated with disturbance of the vasomotor system on the basis of a general fatigue. There seems to be an expression of gradual fatigue.

I don't know whether the doctor has ever tried the following method or not, but, if not, I wish he would try it in taking the visual field. He will find that after taking the upper bar, instead of it running along the ordinary line, it will gradually begin to close in, and instead of the lines joining you will get a condition where the field is described more as a spiral. It does not come back to the original point, or near it, and it can be described more accurately as being a spiral bar.

In some of these cases it is a question whether the correction of these small errors of $\frac{1}{8}$ and $\frac{1}{4}$ diopter does much good outside of the psychic effect. But if you do not get a result in these cases, if you cannot apply the proper psychic

treatment yourself, I think we should refer the patient to a competent neurologist.

DR. H. C. PARKER, Indianapolis: I would like to say one word with regard to the correction of an error of 12/100 diopter cylinder, and that is the case I had of a very religious chap who is an expert chemist. He came under my observation about three years ago. He had had a correction under cycloplegia of 12/100 cylinder, axis 90, with unbelievable relief, so much so that I was skeptical, and as I had charge of refilling the prescription for his lenses, when he came to me one day with one lens broken I submitted two plain ones. He came back to me in about three days with the statement that the glasses for some reason or other must be all wrong, because he had had to go to bed the day before with a headache. I looked them up and said that a mistake had been made, gave him back his 12/100 diopter cylinder, and he had relief.

I also wish to refer to the point made by Dr. Heitger regarding normal vision. I don't think that means anything in testing the individual unless the patient is under full cycloplegia.

I also want to agree with Dr. Bulson with regard to the strength of the homatropin. I use a 2 per cent. homatropin combined with a 1 per cent. cocain, and put it in not less than five times, at intervals of ten minutes, previous to examination. In many instances I use it as often as from ten to twelve times, where I feel that the cycloplegia is not good. I have tried the disks, but have had very little success with them.

DR. JAMES McCALL, JR., Terre Haute: I would like to ask Dr. Newcomb if when the patient is under full cycloplegic action and manifests 20/20 plus, how many retinoscopic findings he has found in contradiction of that fact.

DR. F. C. HEATH, Indianapolis: I believe there is one thing more important than eye conditions, and that is heredity.

DR. W. N. SHARP, Indianapolis: About seven years ago, when the Society met here, I read a paper before it on this subject, referring particularly to the eyesight of schoolchildren, and functional neuroses accompanying errors of refraction.

I want to agree with Dr. Newcomb on several points, particularly with reference to mild errors causing these conditions. That is the point I brought out in my paper seven years ago, as coming from my own experience.

It is claimed that it is not necessary to correct a case under 1 diopter, but I have found that $\frac{1}{4}$ diopter correction will very often relieve these reflex troubles. I have had patients come to me wearing a half; I have cut it down to one-quarter, and have gotten excellent results, with perfect

vision. I had a patient the other day with $3\frac{1}{2}$ diopters myopia, with astigmatism, presenting no reflexes whatever—no trouble of any kind except simply not being able to see in school. I had a little boy with a hyperopia with plus 6 diopters, and he had no reflexes, but simply could not see in school. But the cases with the mild errors of refraction are the ones that usually have the reflexes.

I used to use the tablets a number of years ago, but I found that the tablet would be washed out of the eye. So for a great many years I have been using the drops, and use them according to the case. That is, in frequency according to the requirements. The best authorities tell us that it takes about three-quarters of an hour for the full cycloplegic effect of the 2 per cent. solution of homatropin and cocain. I have had excellent satisfaction with the use of homatropin, without being obliged to use atropin, with children.

DR. NEWCOMB (closing the discussion): In reply to Dr. Bulson's question, whether 12/100 of a diopter is of particular value, I will admit that in a normal individual 12/100 will have absolutely no influence whatever, but when you are dealing with cases such as mentioned in the paper, you are dealing with nerves which are already overwrought, and it stands to reason that a nerve that is already irritable is much more susceptible to minute irritations than is a normal nerve. I have found that that is the condition that exists in these cases. An irritation which an ordinary eye would not be cognizant of will be terribly magnified, and this is simply due to nerve irritation.

In regard to the use of 1/50 of a grain of homatropin, I rather expected discussion on that. I formerly used the solution of 2 per cent. homatropin and 2 per cent. cocain, and I found that six, eight and ten drops did not give full cycloplegia. Then I tried the disks, according to the instructions given by the manufacturer. I put one disk on the lower lid every ten minutes for an hour. I did that for some little time, and gradually began to cut down, and I have followed up a small series of cases in adults where I have made my retinoscopic examination using 1/50 homatropin and cocain, and have later under atropin reexamined with the retinoscope and found absolutely no variation. It may be the quality of the tablet used, or the way in which it is placed in the eye. I place it in the extreme outer canthus of the lower lid, instructing the patient to press against the side of the nose and keep the eye closed for ten to fifteen minutes, and I am confident that by doing it in that way you get practically 1/50 of a grain absorbed by the eye. With solutions I think it is perfectly safe to say that 95 per cent. goes down and anesthetizes your nose and throat.

In answer to Dr. Keiper's question, in regard to the perimetric findings: In all of these referred cases of supposed ocular neurasthenia, I have made the complete perimetric findings—white, blue, green and yellow—and in no case have I found a reversal of the fields of color. In a great many I found the fatigue field, described by Foerster, as mentioned by Dr. Keiper.

Regarding muscular deviations of but 2 and 3 degrees and the vertical deviations, I found on subsequent examination that the lenses had relieved that condition.

So far as the muscular power is concerned, I did not measure it at all.

Referring to Dr. Spohn's question about pruritus, I will have to admit that I can't jump from the eyes to pruritus.

In regard to the amount of physostigmin used, that I also use in the form of a disk. If the members will try using 1/50 grain tablet in the way I have described, and afterwards place the disk of physostigmin salicylate, 1/300, at the outer canthus, they will find that usually within five minutes the patient will speak of twitchings within the eyeball, and inside of half or three-quarters of an hour is able to resume work. I have done that as a routine with business men.

With reference to judging when cycloplegia is complete, my judgment of that is based on the recession of the near point and the apparent total abolition of accommodation. That is as near as any way we can apply in our office.

In regard to neurasthenic asthenopia, mentioned by Dr. Heath, it has been my experience that those cases are really more apt to be hysterical asthenopia.

With regard to 12/100 or 25/100, I think if any of us were to have full correction and then have that added, we would think that it had some effect.

I think Dr. Parker brought out a good point in the case he cited, namely, that the higher the education, the more apt the patient is to need the lower degrees of correction. In lower man you have not the nerve sensitiveness that you have in the higher forms of education. I had one patient who insisted on changing the axis from 15 to 20. He said he could see very much better. I let him turn the cylinder himself. I think the higher the education the more apt you are to have to observe the low degrees.

With reference to Dr. McCall's question, as to the highest error I have found with 20/20 vision, I think that the full retinoscopy was a plus 2, giving a correction of plus 1. For from two weeks to a month afterwards, those patients will complain that vision for close work is perfect, for distance blurred. I tell them that when the ciliary muscle is relaxed the glasses will be all right. When you put the full correction on, you get this condition.

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EDITORIALS

MISCONCEPTION OF INSANITY

It is now a well-recognized fact that the study of mental disease is one that has been grossly neglected by the rank and file of the profession. It is true that the subject is a broad one and to be efficiently pursued requires in itself an endless amount of time and study. This, however, offers no excuse for the abuses which are so common in the present-day methods of handling our mentally sick. No one at all conversant with the routine pursued in our own state, for instance, even though such observer be a layman, can help being both amused and chagrined at the travesty on justice that takes place. Some partisan individual makes affidavit that another individual appeals to him as being of unsound mind, and a political ward-heeler in the form of a justice of the peace summons three grafting henchmen from the medical ranks, who know about as much about mental disease as the average intelligent layman, to pass the final verdict on this poor unfortunate. Little may they realize the effect on the victim of a few short moments they appropriate in questioning this sick subject, as to his future happiness and his usefulness to society. The time has come when the state should have well-trained mental experts whose business it is to give to such mentally sick individuals the benefit of all doubt as to whether or not they are fit individuals for incarceration and withdrawal from social intercourse with their fellow men. The busy general practitioner, whose time is occupied by a large routine of various lines of work, is no more equipped to pass on the intricacies of this specialty than he is on those of the specialties so recognized by the profession. Not infrequently it happens that the men picked for an insanity commission are men not at all impressed with the seriousness of their obligation, both toward the patient and his relatives. It is well known that commitment to some of our hospitals for the insane is the practical equivalent

of an indeterminate sentence to a reformatory, and the task of pronouncing such commitment should weigh heavily on the minds of all those who have a part therein.

Writing on the "Passing of 'Insanity'" in *The Modern Hospital* for March, Dr. Wm. A. White, Superintendent of the Government Hospital for the Insane, at Washington, declares that insanity is solely a legal or sociological concept; that while the so-called insane are mentally diseased, yet not all mentally diseased are insane, and many such persons could best be cared for in a general hospital well equipped for work of this kind. He very pertinently remarks on the lack of interest from the standpoint of preventive medicine which is taken in this class of cases, and deplores the lack of effort not only on the part of our public hospitals, but also a large number of the practitioners of medicine, toward helping incipient cases previous to a frank outcrop of symptoms. Such people, save in rare instances, have no place to go for intelligent advice, and the problem remains unrecognized until so self-evident that the period for availing treatment has passed. The author strongly advocates the introduction of the psychiatrist into the general hospital, not alone for the care of the plain cases of mental disease, but as an adjunct to the internist and surgeon in intelligently caring for the border-line cases.

In addition to the establishment of the psychiatrist in the hospital proper, the author believes that the general hospital should maintain an out-patient department for the advice and treatment of persons with mental disease, in order that those persons so afflicted can as readily seek aid as those with bodily disease. He also advocates a simpler method of transfer from the psychopathic ward to the larger state institutions, such transfer being made effective on certificate of two properly qualified physicians without the necessity of court proceedings unless so desired by the patient, his relatives or some friends on his behalf. Not infrequently, he declares, the modern method of court commitment is pursued against the desires of patient, relatives or friends, and Dr. White advocates leaving the appeal to the court simply as the prerogative of such persons if it be desired.

Under the present régime, our state institutions are overflowing with, and have a waiting list for, those cases diagnosed as acute and with possibilities for cure, while hundreds of unfortunates remain behind in adverse environments for improvement where skilful treatment in some of

our properly equipped general hospitals might render inestimable service both to patients and community. The economical aspect of the question is so patent as to render discussion superfluous.

SIGNIFICANCE OF PULSE-PRESSURE

The time has arrived in the progress of medicine when the sphygmomanometer has become almost as useful an adjunct as the stethoscope. Indeed in many cases complete study of the blood-pressure and its continued observation in all its phases lead the way not only to diagnosis but to successful therapy. Up to the quite recent past, however, it is doubtful if there has been gained from blood-pressure observations anything approaching the amount of information that is now derived therefrom. A simple reading of the maximum systolic blood-pressure in itself means relatively little as compared to the results obtained when a careful study is made of the diastolic and pulse pressures along with the systolic.

Up until the introduction of the auscultatory method of determining blood-pressure comparatively slight attention was given to the diastolic readings, largely because of the difficulty of maintaining a uniform standard. The old method of measuring diastolic pressure by the oscillatory wave was as unsatisfactory as it was unscientific. With the auscultation method, however, it becomes not so much a matter of the difficulty of the obtaining of the actual diastolic readings as to determine what constitutes the true diastolic pressure. By many observers such pressure is thought to be that point at which the second thumping sound becomes dull, while equally as careful observers feel that more uniform results could be obtained by adopting, for the diastolic reading, that point at which all sound ceases. Since the difference between these two points is rarely more than from 3 to 5 mm., and since the latter point is much less susceptible to error by personal equation, it would be well to adopt this low point uniformly and arbitrarily as the correct diastolic reading in all cases.

If we consider the systolic pressure as an indicator of the ventricular force of contraction, then we must regard the diastolic pressure or the pressure existent with the heart and vessels at rest as the indicator of the amount of peripheral resistance, in other words the amount of pressure carrying all the circulation.

In discussing the clinical aspects of the diastolic and pulse pressures in the *American Journal of Medical Sciences* for April, Nicholson illustrates the importance of checking up the systolic with the diastolic and pulse pressure studies by the case of a 60-year-old man whose systolic pressure was found to be 135 mm.; from this the conclusion might be drawn that the individual was quite well preserved but when his diastolic pressure was found to be 110 it becomes evident that his systolic pressure has been much higher and has dropped through heart muscle degeneration in the effort to overcome the high peripheral resistance indicated by 110 mm.

The old rule for determining the proper amount of pulse-pressure for the given case, namely, 35 per cent. of the systolic pressure, is probably less accurate than Stone's recent declaration that it should be 50 per cent. of the diastolic pressure. Stone also accepts the quotient obtained by dividing the pulse-pressure by the diastolic pressure as the cardiac load and states that in severer cases of myocarditis with failing compensation the pulse-pressure is often found greater than the diastolic pressure, giving a cardiac load of over 100 per cent.

An important point made by Nicholson relates to the folly of administering nitrites to every case of hypertension without regard for the normal pulse-pressure for such individual, as though the only indication was to lower the systolic blood-pressure. Indeed, if in such cases of hypertension the normal relation exists between the pulse-pressure and diastolic pressure, harm will result from the use of vasodilators used to lower the systolic pressure and incidentally lessening the blood flowing to the various organs. In fact in advanced arterial conditions the patient is most benefited by small doses of digitalis and strychnin for their tonic effect on the heart muscle, avoidance of all vasodilators and such regulation of life and therapeutics as will best maintain the normal relation between the diastolic and pulse pressures.

Very often a condition of low systolic pressure occurs which is in no wise due to cardiac weakness but to the fact that the arteries and capillaries are widely dilated as indicated by a low diastolic pressure, with a normal range of pulse pressure. Examples of such conditions are those found during convalescence from such severe illness as pneumonia, influenza, etc., with a small pulse-wave or low systolic pressure, wherein active cardiac stimulation would mean whipping up the heart against a lessened resistance like

the racing of an engine by releasing the clutch. If in pneumonia the diastolic pressure is low, vasomotor dilatation is present and requires vasoconstrictors, while if it is high there is marked venous stasis, which calls for vasodilators or possibly venesection.

The whole question is one of balance wherein the problem is not so much one of determining the height of the pressure as the amount of blood that is actually being delivered to the various organs, and this can best be computed by an accurate study of the relation between the systolic and diastolic pressures and the pulse-rate.

Inasmuch as the auscultatory method of estimating blood-pressure, both systolic and diastolic, demands delicacy and precision in the instruments, and since practicability includes instruments that are readily portable as well as durable, Dr. Nicholson has set about to construct a mercury sphygmomanometer fitted into a metal case, which in turn is enclosed in a leather case that may be carried in one's pocket. In his article the instrument is well illustrated and he claims for it all the accuracy and dependability of the larger mercury sphygmomanometer, with the ready portability of the aneroid type.

OUR PROLONGED EDUCATIONAL PERIOD

In an excellent article in *The Journal of Heredity*, Prof. R. H. Johnson of the University of Pittsburgh, discusses the reasons why so many of the best individuals do not mate, and among other things he says that our prolonged educational period is responsible for some of the decrease in matrimony, though there are some other reasons enumerated. Inasmuch as it is the superior members of the race that determine the characteristics of the coming generations it is unfortunate that so many of our educated boys and girls are being carried away from matrimony. Efforts to improve matters must proceed along certain lines, but so far as it applies to our educational methods, what Professor Johnson says is well worth considering. He says:

Cease prolonging the educational period past the early twenties. The professional schools in our country are steadily delaying the age of graduation, and thereby that of marriage. They formerly asked for high-school training, and many still ask no more. But other schools have demanded more and more, till now one requires a collegiate bachelor's degree for entrance. The situation is made still more serious for medical students by the frequent postgraduate hospital practice without pay. It is time to call a halt.

This cannot go on without serious loss to the race. Our young men should not have their marriage postponed by external circumstances past twenty-five years. This means we must allow students to specialize earlier. If there is need of limiting the number of candidates, let us have competitive entrance examinations. We must have our superior men marrying earlier, even at some cost to their early efficiency. The high efficiency of any profession can be more safely kept up by demanding a minimum amount of continuation work in afternoon, evening, or seasonable classes, laboratories, or clinics. No more graduate fellowships should be established till those now existing carry a stipend adequate for marriage.

Already we see a reaction setting in, if we may judge by the attitude of certain institutions that have seemingly lowered their standard of entrance requirements for the study of medicine. It is all well enough to talk about not being too well educated, but there is the danger of cutting off the practical as well as the social value of a considerable portion of a man's existence through overeducation. No one can doubt that pre-medical education should be of that sound and practical sort which is required as a suitable foundation for medical study, but we have been going too far in our demands, and especially so when we are lengthening and broadening our medical courses. Two years of college work should be sufficient as pre-medical education, and we would even shorten this amount if our medical course is to be lengthened to five years and an additional hospital year required as now contemplated. In no other way will it be possible to turn out a medical man ready to earn his living by the practice of his profession who is under 28 or 30 years of age, and more often he will be older. To postpone matrimony until 30 or 35 years of age means that many a medical student will shun matrimony altogether, and even if he does accept matrimony he is apt to fail to secure the most from it because of his change of mental attitude as to the responsibilities of matrimony and the loss of earlier enthusiasms and aspirations.

We therefore quite agree with Professor Johnson in his effort to call a halt in the forces that are now preventing many of our educated young men, and particularly our medical men, from marrying. The only way in which we can correct the growing tendency on the part of medical students to postpone, if not to abandon marriage entirely, is to so modify our educational methods as to permit him to obtain his finished medical education at an earlier period. This does not mean that we must cut down on the amount of medical instruction and learning that is required

of our students, but that it ought to be made possible for students to begin their medical education at an earlier age. It is not fair to them to demand that they shall have an academic degree, requiring four years of study on top of a high school course, which latter at present is more exacting than ever before, in order to be admitted to our medical colleges where four or five years more are required in instructions and where an added year in hospital work is urged in some quarters. If the student intends to practice a specialty his educational period is prolonged still further by from one to three years of post-graduate work. If this thing keeps up it will not be long until the man who is capable of beginning the practice of medicine will be 38 or 40 years of age, and his best years of usefulness will be passed before he begins his active work. By all means let us call a halt.

SALVARSAN VERSUS NEOSALVARSAN

In *The Journal of the American Medical Association*, March 28, 1914, appears an article on observations of the results of nine months' experience with neosalvarsan at the United States Military Prison Hospital, Ft. Leavenworth, Kan. The article is under the authorship of the surgeon and assistant surgeon of the prison, Drs. Kent Nelson and Edgar F. Haines. The interesting feature of the article is the seeming proof that is offered that neosalvarsan is not proving as valuable as salvarsan in the treatment of syphilis. Information is also given to the effect that a coworker of Ehrlich has stated that neosalvarsan is not coming up to the expectations of its discoverers and that experience shows that the treatment of syphilis with neosalvarsan is not showing as good results as with salvarsan, as indicated by the results of the Wassermann tests. Concerning the treatment, the authors state that if it is the aim to "cure" cases, and the "cure" is determined only by the serum tests, then the drug should be used which will reduce the positive serum reactions in the shortest possible time. It has been stated by many that neosalvarsan is a far safer drug to use than salvarsan. The authors believe that a large percentage of severe reactions following administrations of salvarsan were due to faulty technic. Freshly distilled water was not used in all cases, and other precautions, now always used, were omitted. They say neosalvarsan is more easily prepared for administration by unskilled persons, but by those who are skilled in its use, salvarsan is quite as easily prepared.

The authors arrive at the following conclusions:

1. Five injections of neosalvarsan combined with intensive mercurial treatment, have failed to show as good curative results, as shown by the serum reactions, as did one dose of salvarsan.

2. In order to "cure" 70 or 80 per cent. of our cases it will be necessary to use four or five times as much neosalvarsan as salvarsan.

3. In view of the increased number of injections of neosalvarsan to bring about "cures" as stated in Conclusion 2, it becomes a far more expensive drug to use.

4. The drug should be used which will bring about the best results in the shortest possible time.

5. The complement fixation is of the greatest value in diagnosis, or as an indicator to the results of the treatment.

6. In all doubtful cases at least two or three Wassermann tests should be made before a diagnosis is decided on.

GET IT STRAIGHT

Through the courtesy of Dr. Herbert F. Williams, *THE JOURNAL* is enabled to reprint the following bona fide advertisement from the *McLean (Texas) News*:

"GET IT STRAIGHT"

"Please get it straight in your noodlums that some of you still owe me old bills, and that all humans need money, and that a doctor is just human, whether you think so or not. Some people seem to think he is one-half owl and the other half jackass; the owl proclivities making him prefer to be up at night instead of sleeping, and the jack stock he is supposed to possess enabling him to endure all kinds of hardships and live on half feed and hot air promises.

"Some people prefer, it seems, to call a doctor at night, when, if they had to go after him, they would not walk a hundred yards for him. It's awfully easy to ooze up to the wall and call a doctor over the phone, then jump back in bed and wait for him to come through the darkness and cold, and then expect him to come in looking pleasant. I want to tell you it's about as easy to practice medicine and always be pleasant as it is to sit long in a Texas red ant bed and look unconcerned.

"About 95 per cent. of the night calls are useless, anyhow. If the patient is allowed to wait until morning, and a few home remedies are applied, nine out of ten will not need a physician by morning. People take too bloomin' much medicine, anyhow. What some need is to be shot full of hot soap suds with an automatic squirt gun.

"Another thing—get it straight—I charge extra for night work, you bet your sox, and I charge extra for work in unusually bad weather in daytime. Night means, when the sun is blinkin'.

"The cost of living and prices in every line of business have advanced during recent years anywhere from one-fourth to double or more, all except the country doctor's fees. Beginning the first of 1914 I shall charge for day calls in town \$2.50 per call, and \$1 extra, or \$3.50, for night calls. If I make two or three or a dozen calls on the same day, I make no reduction on charges. It's as much trouble to make one call as another, and if you don't want to pay extra trips don't belly-ache for me to make them. Grant knows that if you leave it to me I will make as few as possible. Another thing, please get it straight, I charge for prescribing over phone. Calls to the country are \$1 per mile, one way, except at night, when an extra charge will be made depending on the distance, weather, etc.

"Now, be sure you get this straight; cut it out and paste it in your hat; when you ask me to 'fix up' some medicine for yourself or folks, don't ask me what the medicine is worth and think when you pay for the medicine that you've paid all. I charge for my services and charge from one dollar up. I am not SELLING medicine, I am PRESCRIBING it, and I'm not dishing it out for nothing. I had very good health before I came here. Moreover, cheap doctors are, as a rule, like all other cheap commodities, not worth a darn.

"I charge, and always have, \$15 for confinement cases in town and a short distance from town, and after that, mileage is added. Extra charges are made for extra time of detention or when forceps are used. Naturally, a doctor expects cash for these cases, for you have nine months' warning in which to dig up the dough.

"Now listen, I don't care enough about the practice of medicine to practice just for a job; I want pay for it, and unless you pay, why, I simply don't want your business; and that's not all, you need not send for me if you think I am going to carry your account and troubles indefinitely.

DR. BALLARD."

Selah! Amen! So mote it be! One is strongly tempted not only to paste this in his hat, but also tack it at the head of his bed and say "them's my sentiments." Dr. Ballard has the courage of his convictions and he has placed those convictions squarely, if unconventionally, before the people of McLean. There is a certain picturesqueness about it that commands admiration. The very frankness of the doctor's action will probably go a long ways toward placating the county medical society that would wish to discipline him were he to express himself more diplomatically. In all seriousness, there is much food for thought in the rugged, slipshod vernacular; the abuse of the telephone; the unreasonableness of captious patients; the unpaid services; in fact, all of the abuses that have gradually crept into medical practice are forcefully presented and would afford splendid material to moralize on if Dr. Ballard had not already covered the subject quite convincingly enough.—*Long Island Medical Journal* (March, 1914).

EDITORIAL NOTES

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

A FORT WAYNE physician received a goose from one of his patients as compensation for services rendered. Was there anything suggestive in this act? Perish the thought!

OUR department devoted to classified advertising is worthy of inspection. You may want to buy or sell a practice, or you may be interested in some special offers that are made.

OUR new Hospital and Sanatorium Directory is worthy of the patronage of every hospital and sanatorium in the state and in any of the surrounding states tributary to Indiana. We hope to see it increase in size.

TEN pamphlets on Conservation of Vision have been issued by the A. M. A. Committee, six more are in the printers' hands, and still two more are in the process of preparation. These pamphlets may be secured from the A. M. A. office by those interested in Conservation of Vision work.

THIS year's session of the Association will be held in Lafayette. With such a central location there should be a large attendance. The program committee is busy preparing a list of papers that will do credit to the Association. Volunteers who desire to present a paper at Lafayette should correspond with the chairman of the program committee, Dr. A. C. Kimberlin, Willoughby Building, Indianapolis.

TO THE MEMBERS OF THE EYE, EAR, NOSE AND THROAT SECTION.—It is well for the members of the above section to bear in mind:

That the success of this section can only be maintained by individual interest;

That it requires thought, study, research and time to construct an original paper;

That the meeting of the State Association is not far distant;

That cooperation with the chairman and secretary will facilitate labor and save expense.

Therefore, without further solicitation, subjects of papers or case reports should be in the secretary's hands at as early a date as possible. Let us hear from you.

WALTER N. SHARP, Chairman.

J. D. HEITGER, Secretary.

THE Wisconsin marriage law has been declared unconstitutional. The court held that the amount of the fee provided for the examination as required by law was unreasonably low, and that the law was an undue interference with personal liberty. As *The Journal of the A. M. A.* well says, "Wisconsin's experience should be a warning to state legislatures not to enact hasty and ill-considered laws on complex scientific subjects."

DOX'T forget the annual session of the American Medical Association, to be held at Atlantic City, June 22 to 26, inclusive. As usual, the programs offered by the various sections will furnish a treat that is well worth the attention of all members. Those who can afford to do so, should arrange to take in the Clinical Congress of Surgeons to be held in London soon after the session of the A. M. A., and one trip will suffice to take in both meetings.

SOME of the opticians are attempting to make the public think that their work is endorsed by the medical profession, and to accomplish the purpose more definitely they have the nerve to quote from well-known text-books concerning the effects of eye-strain, but they substitute the word "optometrist" or "optician" for "oculist" or "ophthalmologist." As it is quite unnecessary to resort to this form of deception we fail to see why the opticians should adopt such a questionable procedure.

THE March number of the *Buffalo Medical Journal* publishes a list of 155 titles of papers written by the late Dr. Roswell Park, and states that this is exclusive of numerous articles and minor contributions of which no record has been made. This shows what a really busy man can do, and was to the credit of Dr. Park that his papers not only possessed literary merit, but were of a practical trend and have added much to our medical and surgical knowledge.

UNDER a new rule, only two years of college work will be a requisite to matriculation in the Medical Department of Harvard University. This is not a lowering of the standard of Harvard, but rather an effort to give adequately prepared students an opportunity for beginning the study of medicine at an earlier age, and incidentally it gives the University the long-desired opportunity of increasing the requirements for the granting of an M.D. degree.

THERE is a crying need in Indiana for a detention hospital for the examination and study of persons that are suddenly deranged. It is nothing short of a crime to subject insane persons, many of whom could be restored to health by early and proper treatment, to confinement in city jails and county poor-houses. We believe that all medical men should use their influence in an attempt to correct this abuse.

AN Indiana newspaper contains the following advertisement, in large, black type: "WANTED! A doctor that can cure convulsions. (Signed) A. C. Mannweiler." An editorial note in the same paper says that the advertising ought to bring "the Docs" in droves, but we suggest that the editor should have substituted the word "quacks" for "Docs." and then he would have hit the nail on the head for it is worth mentioning that the man who would publish such a request as quoted is excellent grist for the mill of the quack doctor.

THE cancer quacks are announcing in their advertising that radium is a failure in the cure of cancer. Probably this is due to the fact that radium is an expensive preparation and the reading public knows that it would be difficult for any of the medical quacks to have a sufficient quantity of the remedy for the treatment of cancer. However, the average medical quack has no respect for truth, and we wonder why the quack doctors are not advertising to cure cancer with radium whether they are able to secure any of the new remedy or not.

"OPTONA" tablets are exploited in the daily papers as a cure for eye trouble and to enable people to dispense with glasses. A more pernicious piece of advertising could not be distributed, for undoubtedly there are many ignorant people suffering with serious eye diseases requiring skilled attention who will be tempted to experiment with optona tablets, and there are still others who will be duped by the statement that glasses worn to correct an optical error can be laid aside if the eyes are strengthened by treatment with this quack remedy. The public deserves to know that eyesight is altogether too valuable to be tampered with by such foolish measures as advised by patent medicine manufacturers, quack doctors and even opticians. If there is anything the matter with the eyes, even a need for glasses, the patient will serve his interests best if he consults a reputable physician who makes a specialty of treating diseases of the eye.

At least one newspaper in Indiana is free from objectionable medical advertising. The paper is the Lebanon *Daily Herald*, and the Boone County Medical Association, in its regular session of recent date, has approved the policy of the paper by passing the following resolution:

WHEREAS, The issues of the Lebanon *Daily Herald* to date have contained no fraudulent medical advertisement, be it

Resolved, That the Society approves the policy of the *Herald* in this particular; that a copy of these resolutions be presented to the *Herald* and appear in the minutes of this meeting on the permanent record of the Society.

M. A. ARMSTRONG, Secretary.

The good example should be followed by other newspapers.

THE letter on Glyco-Thymoline logic, printed in *The Journal of the A. M. A.*, March 14, 1914, is worth reading. It shows how gullible the average physician may be if he accepts the stories told by the ordinary detail man, for, as the Glyco-Thymoline agent says, "Most of the doctors I call on swallow most anything a man says." If doctors would use their own brains a little instead of depending on the brains of the smooth talking representative of proprietary medicine houses, there would be less sale for Glyco-Thymoline and a whole lot of proprietary preparations that possess very little virtue and are sold at extravagant prices.

As an aid to intelligent prescribing, every physician should own a copy of the National Formulary of unofficial preparations, published under the authority of the American Pharmaceutical Association. Another book which should be on the desk of every physician is New and Nonofficial Remedies, the 1914 edition of which has just come from the American Medical Association Press. If doctors would prescribe only U. S. P. preparations and those given consideration in the books already mentioned, they would exhibit greater intelligence and honesty in their prescribing than is the case when expensive proprietaries of unknown composition and value are prescribed.

The antivivisectionists, with their customary lack of regard for truth, have published and distributed broadcast the statement that children treated at some of the New York City hospitals, particularly children suffering from contagious diseases, were inoculated with "loathsome diseases" by doctors who desired to experiment. The Department of Health of the city of New

York has taken occasion to refute these absurd and sensational charges in a letter to the Department of Education which has been made public. The worst of the matter is, the charges of the antivivisectionists were aired under glaring headlines in the daily papers, whereas the refutations were given scant consideration, and the antivivisectionists have accomplished, through falsehood and dishonesty, just what they hoped to accomplish—a certain amount of belief in their propaganda.

THE Blue Cast Sanitarium of Woodburn, Ind., announces that it is open for business and will accept patients for treatment. Facilities for the giving of all kinds of baths, including magnetic mud baths, are advertised, as also the wonderful effect of the so-called magnetic water which is advertised as being especially adapted to the cure of kidney and stomach troubles. We would not give this institution notice except that an attempt is being made to secure the patronage and influence of physicians, and the advertising carries the idea that many physicians endorse the institution. As a matter of fact, the principal physician associated with the institution is an advertising doctor whose reputation is such as to preclude the possibility of securing the cooperation of reputable medical men in making his sanitarium a success, even though the extravagant claims concerning the so-called magnetic water and magnetic mud baths could be substantiated.

THE antivaccinationists were put to rout in Columbus, O., when they were asked by the City Health Officer to accompany him on a visit to each case of small-pox that was listed in the city. It was pointed out that inasmuch as the antivaccinationists are not afraid of small-pox they should be willing to make a personal examination of any cases of small-pox, and that the City Health Officer, who was protected by vaccination, was perfectly willing to conduct personally a delegation of antivaccinationists on a tour of investigation which was proposed. It is exceedingly unfortunate that the antivaccinationists were all too busy to accept the invitation, but said that they "might make the trip later." Incidentally, we notice that the antivaccinationists put up the loudest howl in vicinities where there is little or no small-pox existing, and we think the surest and best way to call these fanatics to time is to insist that they back up their opinions by visiting small-pox cases and proving the faith that is in them, or admit that they are chasing a phantom.

It is a sad commentary on the tendency of the times when we find our mails loaded with letters from sanatoriums, drug and opiate institutes and quasi-medical concerns, offering a commission to physicians for referring patients or business, and the worst of it is, these concerns claim that they can find plenty of doctors who not only will accept the offer, but are even soliciting a "rake-off" for "business" referred. Is it any wonder that the medical profession is losing the respect of the public and that non-sensical and injurious legal restrictions are being heaped on the medical profession every time a state legislature meets? The trouble of it is a great many medical men are lowering their profession to a trade, and of course they must expect to take their place among tradesmen in the regulation of practices that are purely commercial and have but little connection with the humanitarian principles which govern our so-called noble calling.

ATOPHAN is one of the newer drugs which has met with the approval of the Council on Pharmacy and Chemistry, and has been found by many physicians as a valuable remedy in the treatment of certain affections. However, it is a safe bet that atophan will eventually be used by an army of people who prescribe for themselves, for the manufacturers, presumably with a keen eye to future business, are marketing the tablets in packages of twenty, and in correspondence concerning the price in bulk the manufacturers quote a price on the twenty-tablet packages only. Knowing that the tablets come twenty tablets to the package it is the most natural thing in the world for the physician to prescribe the tablets in the original package, and it is quite possible that the druggist will seldom remove the original labels. This results in self-medication, and incidentally an increase in the sales of the manufacturer. And the doctor is the one who starts the ball rolling.

MICHIGAN has adopted a new method of fighting the "fee-splitting" practice. Aside from giving publicity to the names of physicians who place themselves on record as opposed to fee-splitting, an effort is being made to secure the cooperation of hospitals in denying hospital privileges to every surgeon who is guilty of the secret division of fees, and permitting those only who refuse to be parties to such commercial transactions to use the hospital equipment. The Board of Trustees of the Grace Hospital in Detroit, at a recent meeting, has made a special effort to

raise the standard of medical ethics by adopting a resolution making it obligatory for all members of the attending medical staff to sign a declaration opposing the practice of fee-splitting and the soliciting of surgical work as contrary to the general principle of medical and surgical ethics and the welfare of the public. If more hospitals would adopt this course and make public the fact, not only would the fee-splitters have a hard row to hoe, but it would be practically impossible for any hospital tolerating "fee-splitting" to secure any considerable amount of support from the public.

IN one of its issues of last year, *The Journal of the American Medical Association* branded the Friedmann "cure" as inefficient, and now one of the representatives of the firm that purchased the Friedmann rights in this country at a fabulous price, has brought suit against the A. M. A. for \$100,000 damages. Considering that the *Jour. A. M. A.* was not the only offender, but that the so-called Friedmann "cure" was swatted on every hand as soon as its comparative lack of worth was discovered, it remains to be seen whether the Friedmann "cure" exploiters will not have their hands full prosecuting newspapers and medical journals from one end of the United States to the other. But when you come right down to the meat of the thing, isn't it a good advertising dodge to bring damage suits and publish the fact in a liberal way? But what an awakening there will be when the evidence is all in, and the *Jour. A. M. A.* takes occasion to give it publicity where it will do the most good! But, pshaw! the fun is spoiled in the beginning, for the suit probably never will come to trial, and we are willing to bet a dollar against a punched nickel that the Friedmann "cure" exploiters do not want it to come to trial.

SINCE publication of New and Nonofficial Remedies, 1914, the following articles have been accepted for inclusion with "N. N. R."

Typhoid Vaccine, Immunizing (H. M. Alexander & Co.).

B. B. Culture (B. B. Culture Laboratory).

Amphotropin (Farbwerke Hoechst Co.).

Trypsin (Fairchild Bros. & Foster).

Thioeol, Syrup Thiocol, Roche (Hoffmann-Laroche Chemical Works).

Phenolsulphonephthalein, H. W. & Co.; Phenolsulphonephthalein Ampules, H. W. & Co. (Hynson, Westcott & Co.).

Cerolin (Merek & Co.).

Anti-Anthrax Serum, Mulford; Antistreptococcus Serum scarlatina, Mulford; Disinfectant Krelos, Mulford; Salicylos; Staphylo-Serobacterin; Strepto-Serobacterin; Typho-Serobacterin (H. K. Mulford Co.).

Tetanus Antitoxin, Squibb (E. R. Squibb & Sons).

Thiocol and Syrup Thiocol, Roche, readmitted to N. N. R.: The advertisements of Thiocol and Syrup Thiocol, Roche, to the public in the form of Sirolin having been abandoned here and abroad, the Council has readmitted Thiocol and Syrup Thiocol, Roche, to New and Nonofficial Remedies (see above).

MUCH has been said in the lay press concerning the deaths at Los Angeles from neosalvarsan injections. It is fortunate that the fatalities occurred after the value of neosalvarsan injections has become very thoroughly established, though it is unfortunate that the technic used in the fatal cases differed from that ordinarily employed and approved by those who have had the most experience. It is known that neosalvarsan is a very unstable substance, and accordingly its administration should be surrounded with all of the safe-guards known to science.

We are also not unmindful of the fact that the administration of salvarsan is not without its dangers unless due caution is observed. Thus Dr. F. T. Rogers, in the *Providence Medical Journal* reports four cases of retinal edema observed within four months, caused by salvarsan injections, and his experience is similar to that of many others. The injurious effect on the optic nerve is supposed to be due to some delayed action of the salvarsan. Rogers believes that a careful ophthalmic examination of every patient should be made prior to the injection of this drug, and his conclusions are the same as many other experienced ophthalmologists who have seen serious involvement of the optic nerve occur as a direct result of salvarsan administration.

CONCERNING the matter of clean medical journals, we are reminded that we shall continue to have medical journals that are a disgrace to the profession just as long as leaders in the profession fail to discriminate in the character of journals to which they contribute. It is very evident that some of our erstwhile leaders know as well as anyone the disreputable character of some of the medical periodicals to which they contribute, but, as one of our exchanges says, "Most great men

are unable to restrain their appetites for journalistic publicity." We condemn the average newspaper editor for his lack of business conscience in accepting advertising of patent medicine manufacturers and quack doctors, yet they are not one whit worse than the medical editor who accepts the rotten advertising which we see in many of the journals that come to our desks. The lay editor will not discontinue the practice of accepting objectionable advertising until he is forced to do so by public opinion, and many a medical editor will not discontinue objectionable advertising until he is forced to do so by an overwhelming sentiment in the medical profession. Subscribers can bring about reform, and a surer way is for all writers to refuse to contribute to journals of unsavory reputation. But, as we have often remarked, why should it be necessary to force an editor to be honest with himself and honest with his readers?

THE *Journal of the A. M. A.*, in commenting on the closing of the Kidd Medical Company at Fort Wayne through the none too gentle efforts of the Federal authorities, pays Fort Wayne the questionable compliment of having more than its share of quack doctors and fake medical concerns. We are quite willing to admit the charge, but in extenuation desire to call attention to the fact that quacks and fake medical concerns thrive in most any city in Indiana, though we venture to say that Indiana is no worse off than some other states that might be mentioned. However, Indiana needs a house cleaning, and we shall welcome the day when we can secure the cooperation of the lay press in accomplishing the much desired end, for we realize that without the assistance of the lay press all efforts are destined to end in failure. If quack doctors and fake medical concerns were denied the privilege of advertising in daily newspapers and magazines, they would die a natural death. Unfortunately, many editors of lay periodicals do not possess the requisite amount of conscience to make them refuse advertising which every well-informed editor knows is helping to perpetuate frauds. We begin to see a change of sentiment, largely brought about by public opinion, and when a few more influential newspapers follow such leaders as the *Chicago Tribune* in efforts to stamp out quackery we shall find the rank and file of newspaper editors and managers falling into line. When that day comes the quack doctor and the fake medical concern will practically go out of existence.

THE Harrison bill was quite satisfactory until the pharmacists, through Senator Nelson as their spokesman, attempted to tack on an amendment which was aimed at physicians. It is an effort similar to that made by the pharmacists in our own legislature last winter to put the drug act in such shape that doctors would have to write prescriptions for everything. If pharmacists do not mean to interfere with the rights of physicians in prescription writing, why should there be any occasion for making a change in the Harrison bill? There is no crying need for such an amendment, and when it is known that the effect upon thousands of physicians will be a great hardship it ought to be an easy thing to defeat it. The country physician is the one that will be hardest hit by any legal action which will require physicians to write prescriptions for everything that is prescribed, and we hope that every country doctor will see the necessity of making his influence felt with legislators whenever an effort to restrict the prescribing by physicians is put forth. A physician who is now a druggist and a member of various pharmaceutical associations says that he knows positively that it is the intention of the influential men in the state and national pharmaceutical associations to bring about legislation which will compel universal prescription writing. If this is true, the sooner the rank and file of the medical profession awakens to the necessity of concerted action to preserve their rights, the better it will be for them. Incidentally, we would like to suggest that if the pharmacists are going to continue their fight against the medical profession, then by all means let us fight them with their own weapons and own drug stores ourselves.

ONE of our subscribers has sent us a copy of the LaPorte *Daily Herald* containing an unusual amount of patent medicine and quack doctor advertising, and asked us to comment on it. Anything we might say would have little effect in bringing about a different condition of affairs in LaPorte, for the daily papers in that city are no worse than the daily papers in every city in Indiana—and for that matter in most of the cities of the United States. We had occasion to talk to one editor of a daily paper in Indiana having a large circulation, on this subject of patent medicine and quack doctor advertising, and he frankly stated, "It's rotten! All of those people should be put out of business, but I am running a newspaper for the money that is in it, and as long as the general public stands for this sort of thing I am willing to take the profit."

That editor was one of the first to fly to the aid of the patent medicine manufacturers and quack doctors when the Indiana legislature was considering a bill requiring medical advertising to state the truth. That editor represents the attitude of the majority of editors who know that they are perpetuating frauds and are aiding in the swindling of the ignorant and the poor, yet his conscience does not prick him when he takes money for aiding the fraud. If some of the large legitimate advertisers would say to editors, "Clean up your advertising pages or you don't get our business," then the editor would sit up and take notice; but just as long as the average newspaper editor can rake in the shekels without losing either reputation or business, he will continue to carry objectionable advertising.

IN the March number of the *Ohio State Medical Journal* we notice an editorial note which reads as follows: "We are endeavoring to clean up the advertising columns, and to print only the announcements of high-class firms." The Lord be praised! If there is any one state medical journal that has needed a vacuum cleaner used on it, it is the *Ohio State Medical Journal*, which up to and including the present time has carried some of the rottenest medical advertising that it is possible to find printed anywhere. The wonder to us has been that the business manager did not accept the advertising of old Doc Hartmann, inasmuch as he is nearby, and the late lamented Lydia Pinkham! But all things come to those who wait, and those doctors in Ohio who have wanted to have a clean medical journal as the official organ of their state medical association seemingly are about to have their wishes granted. We congratulate the editor and business manager on the stand that has been taken, and we are sincere in our hope that they will receive the hearty endorsement of every member of the Ohio State Medical Association in their efforts to publish a journal that shall in every way be worthy of the medical profession of Ohio. It costs real money to publish a medical journal that carries only approved advertising, as we can feelingly testify, but the editor who is at the head of such a journal has a sense of satisfaction that would never be his if he permitted his name to appear as editor of a journal that is more interested in commercial gain than upholding the ethics of the profession. Here's hoping that the *Ohio State Medical Journal* will make its promise good, and when it does we shall be pleased to give the right hand of fellowship and our admiration and support.

THE income tax as applied to physicians is destined to cause a great deal of controversy and difference of opinion as to what constitutes income and expenses, and what proportion of accounts are to be charged off as uncollectable and therefore worthless. As it is now, the tax provides that "persons receiving fees or emoluments for professional service, as in the case of physicians, lawyers, etc., should include all actual receipts for services rendered in the year, for which return is made, together with all unpaid accounts, charges for services or contingent income for that year if good and collectable." If there is any one thing which is uncertain it is the payment of a certain portion of bills for services rendered by physicians. The idea of declaring that a bill is collectable until the debt has been proven worthless following legal proceedings to recover the same, is placing an unnecessary burden on medical men who object to the time, expense and trouble required to demonstrate whether an account is legally collectable or not. To our notion a simple and efficient manner of settling this whole proposition is to count as a man's *gross* income the actual cash received during any given year, and from this should be deducted any and all expenses connected with the conduct of professional work in order to arrive at a decision as to the *net* income. Any inaccuracy or apparent unfairness in taking collectable accounts into consideration will be corrected in succeeding years, and if in collecting the tax it becomes necessary to exhibit the books showing debit and credit, there can be no question about the certainty with which the government will secure all that is due.

THE Conservation of Vision movement should receive considerable attention in Indiana if all those who are taking an interest in the work continue to do something. The editor of *The Journal*, as the Indiana representative for the A. M. A., has been calling for volunteers to deliver Conservation of Vision lectures, and in this number of *The Journal* there appears a letter from Dr. Brose, who represents the State Association, in which attention is directed to the Conservation of Vision work and the need of securing the cooperation of the oculists in making the movement count for something in this state. It makes no difference whether the Conservation of Vision work is carried on under the auspices of the State Association or the American Medical Association as long as something is accomplished, and we hope that every

reputable oculist in the state will feel that he is justified in answering the call that has gone forth. The State Association owns some lantern slides that are available for lecture purposes, and the A. M. A. has sent the editor of *The Journal* an entirely different collection of slides that are also available for lecture purposes. Those who are willing to deliver lectures before lay audiences may obtain several instructive pamphlets dealing with the various phases of the subject by applying to the American Medical Association office, 535 North Dearborn Street, Chicago. With a view to securing credit for the work that has been done and learning what has been accomplished, every lecturer is respectfully asked to make a report in which he states where and when lectures were given, size of the audience, interest manifested, and any other information that may be available. This report should be mailed to the editor of *The Journal*, who is the Indiana representative for the A. M. A., and a carbon copy of the report should be mailed to Dr. L. D. Brose, Evansville, the chairman of the committee of the State Association.

THE Council on Pharmacy and Chemistry could tell some interesting stories concerning misrepresentations on the part of manufacturers of pharmaceutical specialties. These interesting stories will not be told because it is the intention of the Council to encourage firms to deal fairly with the medical profession and public, and whether misrepresentations are purposely or innocently made it is not the policy of the Council to make exposures if firms will correct the misrepresentations. Many of the products that have been passed by the Council are found to be just as represented, but a far larger number of the products were not as represented and before being passed by the Council had to be modified either in method of manufacture or in the claims put forth for them. In some instances the firms have refused to make the modifications, and in consequence the product under consideration was not approved and will not be approved until such modifications are made. It is perfectly easy to understand why some manufacturing firms are opposed to the work of the Council and why some of the firms do not voluntarily submit their products to the Council for approval. Notwithstanding anything that the enemies of the Council may say, it is a perfectly plain and demonstrable fact that opposition arises because the methods of manufacture or the manner of marketing many of the products that are offered to the medical profession for use will not stand the light of scientific or even honest commercial investigation. If doctors will

bear this in mind they will realize the value of the work of the Council and what a great protection it is to both the profession and the public. The manufacturer who tries to be fair and honest in his work and dealings has absolutely nothing to fear from the Council. Before we had the Council we had to take the word of the manufacturers as to the composition and character of their products, and events have shown that not one manufacturer in ten has properly represented his products. Sometimes the misrepresentation was innocently made, but more often wilfully made, and in either case the Council is able to detect the error and offer us a form of protection that we have never had before. The Council deserves support, and the firms that are cooperating with the Council deserve support.

No insurance covering malpractice can be taken out in the state of Iowa, as a law has been passed governing this subject, and two attorney generals have ruled that it is contrary to public policy for a physician to be insured against the consequences of his own act. This is all very well in intent, but how about the doctor who is forced to defend a malpractice suit that is based on false premises? Hasn't the doctor any right to protect himself from the vandals who would despoil him of his reputation and his property, and does the patient who suffers from the effects of malpractice lose anything because the doctor who is guilty of the malpractice carries a policy which insures him against loss? Isn't it true that the average doctor exercises his greatest skill and good judgment, not only because he owes it to himself and the patient, but because he has a well-deserved fear of malpractice suits and the injury brought about by such action? On the other hand, are not the people of Iowa putting themselves in condition whereby it will be difficult to secure the services of any physician in certain cases of fracture where there is the slightest question of doubt as to the ultimate result, and wouldn't the injury fall with greatest weight on the poor? In the face of the rapid increase in the number of malpractice suits that are being brought by those who believe that doctors are good preys for a little easy money, it behooves medical men to take some means of protecting themselves from this growing evil. If concerns like the one at Fort Wayne, which writes an excellent medical defense policy, is not to be permitted to insure physicians against loss from malpractice suits, then it will be necessary for our medical organizations to take up the matter in a mutual way. Fortunately, the Indiana State Medical Association provides medical defense for

its members, and up to this writing the feature has proved itself eminently satisfactory. However, there is not the slightest question of doubt but that companies that make a specialty of this kind of work can and do perform better service than is performed by any mutual organization, and they offer the added advantage of paying the damages if such are secured at the termination of the legal battle.

WE are under the impression that Dr. C. H. Bartlett, president of the Manine Medicine Company, is the very affable gentleman who has been attending the sessions of the Indiana State Medical Association and calling on Indiana physicians in their offices in the interest of a "jag" and "dope" cure. In his conversation with physicians he has laid particular stress on the statement that the institution with which he is connected is operated on the highest ethical plane. However, we are not surprised to be favored with a letter from this erstwhile ethical (?) gentleman in which the information is volunteered that a \$300 fee is charged for taking care of morphin and alcohol fiends, and that out of this fee \$50 is sent to the physician referring the patient. But, "the milk in the cocoanut" is evidenced by the following statement which appears in bold type, the last sentence of which is underscored: "Patients must not be told that we make any division of the fee. *Physicians are required to keep this strictly confidential.*" Isn't this a luscious morsel for the fee-splitters to swallow and wouldn't it raise medical men in the estimation of the public to publish the fact that suffering humanity is a subject of barter and trade? If there is any one thing that stamps the fee-splitting proposition as dishonest and rotten from beginning to end it is the fact, as stated by the Manine Medicine Company, that secrecy must be observed, and the patient must not know anything about the transaction. It is such conduct that brings down on our heads all sorts of restrictive legislation which not only hampers our usefulness, but is a positive detriment to the people whom we are called on to serve. The sooner we have legislation that will make fee-splitting a punishable offense the better it will be for the medical profession and the public. As we have often said before, why do medical men stoop to such unfair and dishonest transactions? They don't come out in the open and defend such actions, for they know perfectly well that the public would never stand for it. It would seem that some of our medical men have lost all sense of honor and decency.

THE Wassermann reaction is a diagnostic method of great value, though it is quite evident that many physicians do not recognize its limitations. That the reaction is positive in the blood of patients who are free from lues is a demonstrated fact. The *Medical Record*, under date of March 21, quotes Boas' reports of results in nearly two thousand controlled cases and shows that a positive Wassermann reaction may occur after anesthesia, in scarlet fever, malaria, leprosy and trypanosomiasis, and possibly in beriberi and pellagra. The test was positive in 6 per cent. of 617 cases of scarlet fever, but only as a temporary occurrence, so that in the majority of cases a repetition of the test would expose the error. In malaria the Wassermann reaction seems to be positive during the febrile stage in the majority of cases. As it is not always possible to find the plasmodia in the blood of malaria patients, serious error might result from a mistake under the circumstances. Fortunately the Wassermann reaction becomes negative in these patients after a course of quinin treatment, and the differential diagnosis is thus made easy. Boas found also that a positive reaction in a syphilitic might become negative after the ingestion of large quantities of alcohol, during fever, and during the death agony. In syphilis the reaction usually becomes positive within four weeks after the infection and remains so unless influenced by treatment. He is inclined to regard it as one of the symptoms of syphilis and as such demanding treatment. It almost always becomes weaker or disappears under treatment, and in the majority of instances is the last symptom to disappear. It is therefore a valuable guide in treating the disease, and treatment should certainly continue as long as the Wassermann is positive. "It will be seen," as the *Record* says, "that a positive Wassermann has a greater value than a negative one, and Boas concludes that a positive Wassermann practically means syphilis. The whole burden of diagnosis should not, however, be placed on the laboratory. The clinician is apparently developing an increasing tendency to demand from the pathologist, not a report, but a diagnosis, and it would seem that many of the difficulties into which he has been led has been due to the fact that he places more dependence on the laboratory report than on his own powers of observation. Only too often these reports are swallowed whole without any attempt at digestion. It will be exceedingly unfortunate if the improvement in the methods of laboratory diagnosis develops a type of physician who will be merely an intermediary between the pathologist and the patient."

WITH all due respect to the reputable druggist who tries to work with the physician harmoniously and to the best interests of the patient, it is a well-known fact that the majority of druggists are doing what they can to cripple the usefulness of the medical profession so far as prescribing drugs is concerned. The average country physician is forced by circumstances to dispense his own drugs, and often the general practitioner in the cities is compelled to carry with him a few drugs that are indispensable as a means of giving patients prompt and necessary attention. It is due to the habit of dispensing any drugs at all that the druggist feels called on to offer objection, and purely with a view to forcing everything in the way of drug dispensing to pass through his hands. He forgets that there is not one druggist out of fifty that does not counter-prescribe or attempt to give medical advice, as he also forgets that it is a rather short-sighted policy to antagonize a profession to which he is indebted for a great deal of the patronage that comes to him. Yet, from time to time bills crop up in the various state legislatures in which a joker is slipped in which is a direct slap in the face of the medical profession, and which, when traced to its originator, is found to come from a group of druggists, and is quietly, though none the less effectively, pushed by the general pharmaceutical profession. Even at this writing we note that there is a bill pending before Congress which provides to impose a special tax on all professions who produce, import, manufacture, compound, deal in, dispense, sell, distribute or give away opium, coca leaves, its derivatives or preparations, and said bill in its original form was not opposed by the medical profession. But all of a sudden some amendments are offered which would prevent physicians from sending by messenger or otherwise remedies for relief when unable personally to attend a patient on the instant, and otherwise prohibits or restricts the prescribing of narcotics by physicians. Such restrictions as proposed would impair the efficiency of physicians and limit their usefulness to the people. The interesting feature of the question is the assertion made by those who know that the amendments have been offered in the interest and having the endorsements of the dispensing druggists. Is it not time that the medical profession awakens to the necessity of doing something for its own protection and is it not time for the medical profession as a body to have a definite understanding with the pharmaceutical profession to the effect that we do not propose to continue "feathering the nests" of the druggists and receiving nothing but opposition in return?

DEATHS

MRS. ISABEL MORROW, wife of Dr. B. B. MORROW of Muncie, died in that city March 7.

W. T. SHROUT, M.D., of Waldron, died very suddenly of apoplexy March 27; aged 67 years.

LEONIDAS V. WINSTON, M.D., died at his home in Knightstown on April 1, of pneumonia, aged 69 years.

JAMES P. MOSER, M.D., passed away at his home in Windfall, March 19, aged 65 years. Death was due to pneumonia.

FRANCIS HART KELLEY, M.D., passed away at his home in New Harmony, March 3, aged 78 years. Death was due to paralysis.

FRANCIS M. CARR, M.D., died at his home in New Market, March 25, death being due to the infirmities of old age. Dr. Carr was born in Clark County, Jan. 3, 1831, attended school at Charlestown, read medicine at New Washington, graduated from Louisville Medical School in 1855, and has practiced medicine at New Market for over fifty years. He was 83 years of age.

BURVIA A. HOUSER, M.D., passed away at his home in Wabash, March 25, after a several months' illness due to kidney trouble. Dr. Houser was born near Somerset, Ind., in 1866, received his early education in the Somerset and Amboy schools, and graduated in medicine from the Indiana Medical College in 1890. He was a member of the Wabash County Medical Society and the Indiana State Medical Association.

NEWS NOTES AND PERSONALS

INDIANAPOLIS

DR. L. C. CLINE and wife have recently returned from a vacation trip to Florida.

THE Review Club was the guest, at its regular meeting, March 16, of Dr. A. C. Kimberlin at the Columbia Club.

DR. J. G. NEHRBAS, 517 N. Penn Street, was seriously injured Saturday evening, March 28, as the result of an automobile collision.

DR. MANN, a graduate of last year from the Indiana University Medical Department, has accepted a position in the laboratory of the Rochester (Minn.) Clinic.

A COMMITTEE of the Indianapolis Medical Society composed of Drs. Jaeger, Brayton, Kennedy and Charlton, has been appointed for the purpose of aiding in the Cancer Educational Campaign.

ACTIVE efforts are in progress for the erection of a Marion County Tuberculosis Hospital. Members of the County Council are reported to be in favor of such an institution and its erection is thought to be a matter of only a short time.

THE Indianapolis Medical Society appointed a committee of twenty to devise ways and means for the acquirement of a permanent home for the society. This is the biggest proposition the local organization has ever undertaken and it will test to the limit its capacity for united and concerted action. No one doubts but that the resources of the membership are ample for the success of such an undertaking. The big question is to get a feasible scheme, which will be backed by all the members.

It has been decided by the Faculty of the Medical College to hold monthly seminars, one for the medical and one for the surgical side. The former meeting the first Friday of the month, from 5 to 6 p. m., and the latter the third Friday at the same hour. Attendance at these meetings is made obligatory on those actively engaged in teaching. Dr. C. P. Emerson will have charge of the medical, and Dr. J. H. Oliver the surgical seminar. The time is to be spent in a review and discussion of the current medical literature.

At a recent faculty meeting it was urged, by Dean Emerson, that a larger interest in medical research work should be cultivated by those who are interested in the teaching of medicine. It was pointed out that one of the functions of a medical college was to produce some original work which could be regarded as a distinct addition to the sum total of medical knowledge. Some work has already been done and has received modest recognition, but much more needs to be done. If a medical college is to be a living, growing institution it must produce something besides routine classroom work.

GENERAL

DR. C. E. SHOLL of Camden, fell recently, fracturing his right ankle.

DR. P. G. CARLISLE of Connersville has been quite ill with pneumonia.

DR. E. J. HAGENBAUGH has returned to Elkhart after spending a year in the Southwest.

A CAMPAIGN to raise \$40,000 for a new city hospital for Bloomington will begin about May 11.

THE next meeting of the Eleventh Indiana Councilor District will be held at Logansport, May 21.

DR. AND MRS. F. D. NORTON of Columbus have returned from Tampa, Fla., where they spent the winter.

DR. WM. H. GILBERT of Evansville, charged with having set fire to his sanatorium, was acquitted March 14.

DR. C. A. DRESCH and DR. E. J. BALL have recently been appointed members of the City Board of Health of South Bend.

A PETITION for a Marion County Tuberculosis Hospital, under the Acts of 1913, has been filed with the County Commissioners.

DR. C. E. MARTIN of Farmland was operated on at the Methodist Hospital in Indianapolis March 22, for abscess of the brain.

DR. AND MRS. H. V. BROWN, who have been spending the winter in Florida, expect to return to their home in Portland about May 1.

DR. FRANK BROUGHTON, who for thirty years has practiced medicine in Waterloo, has opened an office at Kendallville and will continue the practice there.

DR. OTTILIE GRAUBERG, who for some time has held the office of woman surgeon at Longcliff Hospital, Logansport, sailed the latter part of March for Europe.

DR. AND MRS. M. L. BOND of Aurora have returned home from a several weeks trip through the West, including California. Dr. Bond's health, which has been quite poor, is much improved.

DR. JOHN W. BELL of St. Paul has sold his practice to Dr. W. R. Turner of Madison, who will take possession May 1. Dr. Bell expects to locate in Youngstown, Ohio.

DR. FRANK S. CROCKETT of Lafayette will leave April 29 for London and Vienna, where he will take up some special work along the line of genito-urinary and rectal surgery.

DR. C. B. MOSHER of Valparaiso has sold his practice to Dr. S. J. Young of Indianapolis, and will return to his former home in New York state, after an extensive trip through the West.

WORK has been resumed on the new Mercy Hospital at Gary, and will be rushed to completion. It is expected that the building will be open to the public by June 1 or soon thereafter.

DR. A. R. SIMON of LaPorte sailed April 15 for Europe, where he will take up some special post-graduate and hospital work on the eye, ear, nose and throat in Berlin and Vienna. He was accompanied by Mrs. Simon.

THE new Bowers-Lescher Sanitarium at Vincennes was opened to the public on March 19. This sanitarium is under the management of Drs. Eugene Bowers and E. R. Lescher, formerly of Mt. Carmel, and has a nurses' training school in connection.

THE many friends and admirers of Dr. G. W. H. Kemper of Muncie will be delighted to learn that his wife, who was operated on in the Methodist Hospital, Indianapolis, seven weeks ago, for carcinoma of the kidney, is now apparently making a satisfactory recovery.

A FUND of \$10,000 per year has been donated to the city of Muncie by Burt H. Whiteley, a prominent business man of that city, whereby the sick and injured of the city who are unable to secure adequate medical assistance and nursing because of financial conditions will be cared for at the new Home Hospital, which is just now being completed.

THE Elkhart County Medical Society took advantage of the opportunity offered by the Indiana University Extension Bureau and held a public meeting in the First Presbyterian Church, Elkhart, on the evening of February 27. Dr. Burton D. Myers of Bloomington gave his interesting lecture on "Eugenics." The very large auditorium was filled.

THE United States Department of Agriculture has issued a warning to users of turpentine for medicinal or veterinary purposes, cautioning them to make certain that it is not adulterated. The Department has found that turpentine may be adulterated (with mineral oils) in the South, where it is made, and that the further it gets from the South the more extensively and heavily it is adulterated.

THE Elkhart Academy of Medicine held a joint meeting with the Elkhart Ministerial Association in the Assembly Hall of the Public Library on the evening of March 27. The subject of "Heredity" in some of its more particular phases was discussed by Drs. E. M. Hoover, C. D. Goodrich, Hannah O. Staufft and G. W. Spohn as representing the Academy. A motion was made and carried that the school teachers of the city be invited to join to form a triangular association of physicians, ministers and teachers. A fall and spring meeting will be held each year to discuss eugenic and sociologic subjects. Dr. G. W. Spohn presided.

THE Committee on Pollution of Sewerage of the Merchants' Association of New York has issued the following warning: "Kill Flies Now!" "The extermination of the winter fly is the duty of the housewife and of everyone. Don't let one escape. Catch and kill them all before spring, for the winter fly is the parent of summer's destructive swarms. The time to destroy the fly is before it has had a chance to lay its eggs. Now is the time! Capture every one of the filthy little pests you can find. A single fly is capable of depositing 150 eggs at one time, and of producing five or six batches during its short life. The progeny of a single pair of flies, assuming that they all live, if pressed together at the end of the summer, would occupy a space of over fourteen million cubic feet. This would be equivalent to a building as large as the Woolworth Building. These figures show the incalculable possibilities of a single fly and how vital it is to destroy the winter flies. Don't think because the flies do not annoy you now that they should not be 'swatted.' Now is when 'swatting' is most effective."

THE mid-year meeting of the Medical Section of the American Life Convention was held at French Lick Springs, March 4 to 6, inclusive. Dr. Will J. Mayo of Rochester, Minn., gave a talk on the mortality in operations on over-weights, a hazardous risk and another address on the prognosis following operation for surgical

diseases of the abdomen. The symposium on the preservation of health was led by Dr. J. N. Hurty, Secretary of the Indiana State Board of Health, and Col. W. C. Rucker, Assistant Surgeon-General, U. S. Public Health Service. One whole evening was devoted to x-ray demonstrations. Among other prominent men on the program were Dr. C. Naumann McCloud, St. Paul; Dr. Fred M. Hodges, Richmond, Va.; Dr. H. A. Baker, Pittsburgh, Pa.; Dr. Henry H. Schroeder, New York; Dr. Amand Ravold, St. Louis, Mo.; Dr. T. D. Crothers, Hartford, Conn.; Dr. Robert H. Babcock, Chicago; Dr. Charles L. Mix, Chicago; Dr. Geo. V. I. Brown, Milwaukee; Franklin B. Mead, Fort Wayne; Dr. Jas. T. Case, Battle Creek; Hon. T. W. Blackburn, Omaha, Neb.; Dr. W. Edw. Magruder, Baltimore; Dr. Wyeth E. Ray, New York; Dr. A. M. Campbell, Grand Rapids.

The officers are: Chairman, Dr. Jas. H. Stowell; vice-chairman, Dr. Whitfield Harral; secretary, Dr. F. L. B. Jenny.

CORRESPONDENCE

ERLANGER, KY., April 1, 1914.

To the Editor:—I received the copy of THE JOURNAL as requested. Many thanks for your kindness. Enclosed you will find stamps in payment. It is my first acquaintance with your journal, but certainly I can compliment you on such work.

Very truly yours,
C. W. McCOLLUM, M.D.

APPRECIATION OF THE JOURNAL

NASHVILLE, TENN., March 28, 1914.

To the Editor:—I have just received a copy of the March number of your journal and cannot refrain from expressing my great admiration of its quality, and particularly the high-class editorials that are ringing with truth and tempered with good judgment. I was impressed with the fact that it was one of the liveliest state journals I have had the pleasure of seeing.

I note that your state has gotten out a Bulletin on Medical Frauds. Would you be kind enough to have one sent to me, with invoice?

With kind regards, I am,
Fraternally yours,

W. D. HAGGARD,
President, Tennessee State Medical Association.

APPRECIATION OF THE JOURNAL

In a personal letter from Dr. George H. Simmons, editor of *The Journal of the American Medical Association*, we extract the following paragraphs, which we think are of interest to our readers. We have not secured Dr. Simmons's permission to publish his comments, but we feel sure that no objection will be offered, so we are reproducing that portion of his letter which refers to THE JOURNAL.

CHICAGO, March 26, 1914.

Dear Dr. Bulson:— * * * Let me take this opportunity of saying a word in the way of congratulation. I have before me your March issue, and I am astonished, not only at the large amount of matter you are publishing, but also at the quality of this material. Aside from the good, practical, original articles, your editorials are splendid. You show an aggressiveness in your attempt to bring about better conditions that requires courage; you may occasionally make an enemy, but it is in this way that something can be accomplished. When the members of the Indiana State Medical Association get twelve such copies a year for the small sum of \$1, they certainly cannot complain of the high cost of their medical literature.

Do you ever stop to think of the difference between the present method—the monthly journal—and the old annual Transactions? The latter were issued between four, six and eight months after the annual meeting, and contained simply the transactions of the state society. And then the members did not get them for \$1 a year by any means.

Sincerely yours,

GEORGE H. SIMMONS

CONSERVATION OF VISION

EVANSVILLE, IND., April 1, 1914.

To the Editor:—At the 1912 session our State Medical Association initiated a movement for instruction along the lines of conservation of vision for the general public, and Dr. George F. Keiper was made chairman of the committee. At the 1913 session an appropriation of one hundred dollars was authorized to carry on the work. In addition, the Association purchased illustrative stereopticon slides that may be used in elucidating such lectures as are given. For the current year the writer has been made Chairman of the Conservation of Vision Committee, and he desires especially to enlist the interest and services of those members of our state organization who specialize in eye-work, in bringing the subject by lecture or otherwise before the general public. To further this he has apportioned the state into three districts, placing the northern counties under the jurisdiction of Dr. Bulson, the central under the jurisdiction of Dr. Keiper and the southern under the chairman's jurisdiction. The work to be done in Indiana, if done at all, can be accom-

plished only through the united efforts of our Association members. In view of the fact that those members of the Association who are especially interested in eye, ear, nose and throat work have a separate section, those belonging to that section should feel that they especially are sponsors for the success of the conservation of vision movement and be willing in every way to cooperate with Drs. Bulson, Keiper and the chairman. The success, as well as the failure of the work depends on the cooperation of medical men all over the state, and unless they are willing to give some of their time and assistance in furthering the object of the movement, little or nothing will be accomplished.

L. D. BROSE.

SOCIETY PROCEEDINGS

FORT WAYNE MEDICAL SOCIETY

Meeting of November 4

Society met in regular session in the Assembly Room with twenty members present.

Minutes of previous meeting read and approved as read.

Clinical cases:

Dr. G. W. McCaskey reported a case of dextrocardia without transposition of other viscera, and with exhibition of radiograms of chest and abdomen. Case was reported because of its rarity, as only one case in 250 of congenital dextrocardia occurs without transposition of abdominal viscera.

Dr. G. W. McCaskey also reported a case of an enormous intrathoracic tumor projecting upward into the cervical region, the palpable portion being of distinctly bony consistence. The first symptoms appeared about one year ago, attributed to a cold which produced a cough that has continued ever since, obstructive dyspnea developing a little later and continuing ever since. Radiogram showed an enormous tumor, probably osteosarcoma, occupying a large part of the right chest and extending over into the left side. Its point of origin was probably the posterior aspect of the sternum.

DISCUSSION

DR. WEAVER: In spite of the absence of any history of intrathoracic disease, we must account for the diffuse shadow in the right thorax before we can call this case a primary dextrocardia.

DR. PORTER: Is there any asymmetry in the chest on the right side

DR. MCCASKEY: Yes.

DR. PORTER: The fact that the intracostal spaces are closer together makes it probable that it is not a case of congenital dextrocardia but is acquired.

DR. EDLAVITCH: I think the condition in the second case is capable of another interpretation. There is dulness in apex of right chest which shows some invasion of lung. This might be a mediastinal tumor rather than an osteosarcoma. The Roentgen ray helps us in determining that the clavicle is not involved.

DR. GRANDY: Some time ago I reported a small celled sarcoma of the posterior mediastinum which gave the same symptoms as Dr. McCaskey's case.

DR. GREENAWALT: In the first dissection I ever made I had a case of congenital transposition of all the viscera. I recall a case of a male, 50 years of age, who was suffering from dyspnea in which there was transposition of the heart.

DR. B. A. BLOSSER: As to the physical findings in this case, we had abnormal breathing over left side where the heart should be. I never was able to detect anything abnormal in the chest except this condition.

DR. MCCASKEY (in closing): I think that there is nothing else in this case but dextrocardia. There was nothing abnormal in the right chest. The opacity in radiogram is no doubt due to a thickened pleura. The tumor in neck in Case 2 is partly covered by the lead foil. This growth is hard and does not yield an inch to pressure, but seems to be a part of the bone.

DR. BEALL: Case 1.—Male. Amebic dysentery.

DR. BEALL: Case 2.—Female; 50 years of age; married; twelve children, two died in infancy; menses regular. Family history: Mother died of influenza, father of cancer. Patient developed pain in head followed by blindness in right eye; left became involved. Liver enlarged. No other condition in abdomen. Pigmented spots in both retinae. The shins presented lumps which were attached to the bone. Thought the case was due to syphilis. Patient was put on antisyphilitic treatment. Diabetes cleared up, only to return when treatment was stopped.

DR. PORTER: Is a lesion of this type, providing it is specific, in the brain, liver, or pancreas?

DR. GRANDY: I saw an abstract of an article detailing histories of fifteen cases of diabetes which gave positive Wassermann reactions, and got better on anti-specific treatment.

DR. MCCASKEY: It is impossible to draw a sharp line between persistent glycosuria and diabetes. Glycosuria is a weakening of the glycolytic function. If glycosuria occurs every time a patient takes a meal of carbohydrates, that patient has a mild diabetes. The association of syphilis and glycosuria is very interesting.

DR. WEAVER: Case history of typhoid perforation.

DISCUSSION

DR. DUEMLING: In the cases that I have seen perforation is small and usually occurs in crater of ulcer. The method of closure is important. Any method which does not constrict lumen of bowel is useful. A purse-string is best. I object to washing out peritoneal cavity following perforation of bowel from any cause. I do not believe that any surgeon would close belly following a lesion of this kind. I would avoid placing unprotected gauze drains against the parietal peritoneum. I would drain rectovesical pouch.

DR. PORTER: I would like to call attention to one thing, that by no means would a well placed drain have saved this patient's life. There may be enough bacterial involvement through Peyer's patches to have given him general peritonitis. This drain in these cases should never be unprotected gauze.

DR. WEAVER (in closing): Most ulcers which perforate present pin point opening. In closure of ulcer the purse-string suture plus mattress suture is best. I would disregard any maneuver which might lead to production of a fecal fistula or hernia, to save the

life of a patient of this type. The end results are easily disposed of.

DR. DUEMLING: Case report.—Female; 47 years of age; American; housewife. Tumor in region of parotid gland. Tumor was enucleated and shelled out easily. Rubber bands used as drainage. Tumor the size of a large egg. Cut surface wide. Tissue all of one kind. Microscope shows areas of cells with poorly stained nuclei. Mucoid material and areas of hemorrhage. It is impossible to say whether this tumor is sarcoma or carcinoma.

DR. DUEMLING: Case 2.—Female; 32 years of age; housewife; diagnosis of exophthalmic goiter. Gland injected with 12 c.c. of boiling water. Patient had some trouble with heart six years ago, called attacks of hysteria; recently permanent symptoms, such as weakness, tachycardia, goiter, and exophthalmos have developed, with pain in abdomen, and diarrhea. There was some cutaneous eruption. I put patient to bed, tried absolute rest for several days without any relief of symptoms. She was then taken to the operating room and both superior thyroid arteries were tied. As a result of this procedure the tremor was lessened, but she was not benefited in any other way. One lobe of thyroid removed and part of the other. She developed bronchopneumonia, and is now improving. Specimen of gland exhibited.

DISCUSSION

DR. PORTER: This is a tumor of the parotid lymph-gland and not the parotid gland itself.

DR. EDLAVITCH: This looks to me like a mixed tumor of the parotid. It is soft, encapsulated, and its location and ease of removal point toward this conclusion.

DR. WEAVER: Endotheliomata must be considered in connection with a growth of the parotid gland.

DR. E. A. Ish of Laotto, Ind., made application to become an associate member of the Fort Wayne Medical Society. Motion carried that the secretary cast ballot of the society for the admission of Dr. Ish as associate member. Vote so cast.

Secretary brought to the attention of the society the work being done by the *Chicago Tribune* in relation to the prosecution of quack doctors. Motion carried that the secretary be instructed to communicate with the editor of the *Tribune* commending the work of his paper.

Adjourned.

G. VAN SWERINGEN, Secretary.

INDIANAPOLIS MEDICAL SOCIETY

Meeting of March 3, 1914. Washington Hotel

Meeting called to order by the president. Minutes read and approved. Application of Dr. G. W. McCaskey was read for first time and posted for thirty days. Applications of Dr. C. D. Holmes and Dr. G. W. Kohlstaedt were read second time and referred to council. Attendance 80.

Program.—Case Report: Hodgkin's Disease. Dr. H. A. Jacobs.

In this case the entire chain of maxillary glands on left side was removed and returned within one year. Sodium cacodylate was administered in seven grain doses hypodermatically on alternate days. High frequency and roentgenotherapy were tried with no results. Benzene treatment of Lawson and Thomas was ineffective. Reference was made to medical literature in which case reports showed autogenous vac-

eine treatment was given and seven out of twelve cases recovered, but considered too recent for report of permanent results.

Case Report.—Stab Wounds of the Diaphragm. Dr. W. E. Jobes. Case 1.—Wound on outer aspect of thorax at lower aspect of eighth rib, omentum protruding. Shock extreme. Median exploratory laparotomy, but little hemorrhage and no visceral injury. Rib resected and wound of diaphragm closed from above. Recovery uneventful.

Case 2.—Thoracic Wound in Sixth Interspace. Median laparotomy free air escaping as peritoneum was incised. Little hemorrhage and no apparent visceral injury. Rib resected and wound in dome of diaphragm closed. Death from peritonitis in six days. Autopsy revealed puncture in cardia of stomach.

Case 3.—Thoracic wound enlarged by removing rib, wound in diaphragm likewise enlarged subjacent viscus grasped and brought into wound, puncture of stomach closed. Median laparotomy, abdomen closed. Recovery uneventful. After considering the difficulties and advantages incident to both the thoracic and abdominal routes in approaching wounds of the diaphragm the writer concludes that the indications for operation can only be met by combining the two.

Case Report.—Brain Tumors. Dr. C. D. Humes. A case of brain tumor appearing in a male, aged 25, with a negative family and personal history prior to the onset of his illness of February, 1913, at which time he was taken ill rather suddenly with a severe pain in back of head and neck, patient comfortable only when lying down, upright position increasing pain, causing a drawing forward of head on chest, together with semi-rhythmic nodding and twisting of head toward left shoulder. An eye examination revealed a weak left external rectus. Six months later reexamined and found pronounced choked disc in both eyes, backgrounds not different, both showing venous congestion and tortuous veins. No particular disturbance of the central nervous system, the patient complaining only of severe headache, which was almost constant in the right occiput and at times very severe and boring. Blood and spinal fluid negative to Wassermann, 20 c.c. of spinal fluid taken. The clinical findings ruled out tuberculosis, so the question of a new growth was practically decided on. One week after the removal of the 20 c.c. spinal fluid his eyes were found to be normal. Physical examination revealed nothing out of the ordinary and the patient expressed himself as feeling very well in every regard except occasional flashes of blindness which only caused him temporary annoyance. Also at times he had a return of the boring pain in the right occiput. At the end of another week he was suffering intense headache, was nauseated and was rapidly growing worse at this time. His eyes now showed profound choked disc, the right being somewhat more congested if there was any difference at all. Following that report of the last eye examination a diagnosis of brain tumor was definitely determined, immediate operation advised and agreed on. A large right-sided subtemporal decompression was made. The patient's vision improved considerable during the next few days, but at the end of a week further procedure was advised to save the sight, if possible, as the patient at this time was almost completely blind. On reopening the original flap a large amount of brain tissue escaped and the patient's general condition would not permit

a left-sided decompression. He rallied slightly and improved for a few days, only to grow weaker and died on the tenth day following the second operation. July 5 a post mortem was held and a tumor mass found in the extreme tip of the temporal lobe near the middle line, and occupying the inferior portion at this point. The tumor was removed *in toto*, was egg-shaped and approximated the size of the average hen's egg, and proved to be a gliosarcoma. The diagnosis was arrived at only after ruling out tuberculosis and syphilis and confirmed by the eye findings, which as in every case of brain tumor are invaluable. The particular features of importance were the absence of any definite focalizing symptoms in the presence of a large growth in a highly organized portion of the brain. The other interesting feature was the rapid clearing up of the background of the eyes after a withdrawal of only 20 c.c. of spinal fluid and the rehooking of the discs in one week following the spinal puncture. Drs. Coleman, Sexton, Parker, Morrison Thrasher and Alburger lent valuable aid.

Dr. Noble reported a case of chronic jaundice due to obstruction at the papilla. A man of 50 years of age, family and personal histories negative, became jaundiced six months ago. No pain, no tenderness. Liver increased so that the lower border was 3 inches below border of ribs. According to Courvoisier's law, a tentative diagnosis of cancer causing the obstruction was made. Exploratory laparotomy performed and dissection of biliary ducts and pancreas made. Duodenotomy over ampulla of Vater revealed a benign stricture of papilla. This obstruction was cut out and suture anastomosis made between common duct and duodenum. Case is of interest in that the terminal events of biliary cirrhosis and pancreatitis were absent. Recovery.

DISCUSSION

DR. POTTER: Arsenic is the usual drug given in Hodgkin's Disease, but would like to know how successful the administration of salvarsan has been. In reference to Dr. Noble's case I would say that no one should be let die without surgical interference. Cited a case of apparent acute obstruction which proved to be a small tumor in common duct.

Dr. Wynn said he gave salvarsan to one case of Hodgkin's Disease with no favorable result.

DR. STERNE: In reference to the case report reported by Dr. Humes, it is important to note that with the tumor in the region in which it was located; viz. the left temporal lobe near the tip, that there was an entire absence during life of clinical symptoms usually present with lesions in that particular location. These symptoms form a syndrome which we call uncinate epilepsy with an aura of taste and smell and frequently involving the abdominal viscera together with a dream-like state, lasting for a greater or lesser length of time. Such a syndrome is quite typical of lesions in the forward portion of the temporal lobe in which the cortical centers of taste and smell, and possibly for visceral sensations also lie. Another important lesson is the effect which we frequently note in spinal punctures and the withdrawal of cerebral spinal fluid in the choking of the discs. In this instance it is to be observed that in the first examination made by Dr. Parker, papillitis was found. At this second examination the congestion and choking of the discs, in fact the whole fundal appearance had changed. The spinal puncture had been made

a couple of days prior to the second examination and it is very likely indeed that the withdrawal of the cerebral spinal fluid was directly responsible for the betterment in the condition of the fundi as well as the general condition of the patient. About a week after the second examination, the papillitis had become intense, as found by Dr. Morrison and the general condition of the patient had become much worse. Papillitis, or choked disc, is a distinct indication for operative interference, even where the exact location of the gross lesion within the cranium has not been determined. It is essential to save sight and not infrequently places the patient in a condition for a secondary operation with a successful removal of a tumor within the cranium.

DR. ALBURGER: I find it difficult to make a diagnosis of Hodgkin's Disease. I believe it is a disease for clinical diagnosis, not pathological. I look on such a diagnosis with suspicion.

DR. DODDS: Glad to hear Dr. Alburger confess that pathologists cannot always make a diagnosis by aid of microscope. We now have the aid of fluoroscopic screen in showing viscera in case of stab and allied wounds.

The society spent an hour discussing the problem of a permanent home. Finally by a unanimously carried motion the chair was asked to appoint a committee of twenty to investigate and report later.

Meeting adjourned.

Meeting of March 10, 1914. Washington Hotel

Meeting was called to order by the president. Minutes read and approved. Application of Dr. Ernest E. Wishard read for first time and posted for thirty days. Attendance 75.

Program.—Report of Cases. Dr. J. H. Payne.

Case 1.—Laryngotomy. Boy 2 years of age choked on a peanut kernel. Apparently dead. Heart weakly fluttering. Plunged bistoury through thyroid membrane, dilating opening with artery forceps. Inserted metal catheter between vocal cords elevating epiglottis together with kernel. Closed with four stitches. Uneventful recovery.

Case 2.—Lithiasis. J. A., inmate of Julietta asylum. Unable to void or defecate. Anemic, despondent and distressed. Died of uremia and auto-intoxication. Autopsy. Bladder seemed to be a hard tumor. Found to be filled with soft calculi simulating "Wallaston's Calculus" described in 1797. The calculi were large and small, laminated, non-symmetrical, light in weight and rather hard.

Case 3.—Uterine Hemorrhage. Mrs. M., aged 52. Borne four children. Peri-uterine cellulitis followed last terminating in suppuration and discharging through bowel. Menopause began at 40 with severe hemorrhage which a trachelorrhaphy by Dr. T. B. Harvey stopped. Was called first on account of uterine hemorrhage. Uterus large, hard and tender. Packing and ergot had no effect for quite awhile, then only temporary. Finally galvanism after the method of Apostoli of France was used for eight weeks. Fifty to three hundred milliamperes were used. Patient recovered and is now enjoying good health at 76.

Paper: Aids to Diagnosis in Pelvic Inflammations in Women. Dr. Ada Schweitzer.

Abstract.—Pelvic inflammations include various inflammatory conditions involving pelvic viscera.

Many cases are diagnosed so late that treatment can only be palliative. In origin they are infectious or noninfectious. In either case the inflammatory condition may be sudden in the onset, with acute well-marked symptoms or it may be chronic, with obscure symptoms often apparently referable to unaffected organs. The non-infectious varieties are more infrequent and may originate in the irritative action of some chemical secreted by the tubes and ovaries or to some foreign body in pelvis.

The more common infectious organisms are gonococcus, streptococcus, staphylococcus and colon bacillus. Cases due to pneumococcus, *B. pyocyaneus*, *Bacillus Aerogenes Capsulatus* and tubercle bacillus have been recorded. Primary infections are likely to occur as a direct result of labor, abortion, instrumentation or gonorrhea. The secondary are due to an extension from an inflammatory focus as the appendix or bladder. The manner in which the infection extends aids in diagnosis. The ordinary gonorrheal infection extends to the peritoneum by way of the uterine mucosa through the Fallopian tubes while infections following uterine trauma extend by means of the lymphatics directly through wall of uterus from the endometrium to the cellular tissue, or through the thrombosed sinuses in puerperal cases to infective thrombosis of the broad ligament veins. Important aids to diagnosis are age of patient; civil condition; habit of life; family history; symptoms; posture and facial expression; personal history; character; location and duration of pain. Palpation, auscultation and careful bimanual examination by physician are requisite. Microscopical examination of discharges either the cervical discharge or of the lochia may clear up the diagnosis. Vaginal specimens are not usually satisfactory. Blood cultures or cultures from cerebrospinal fluid may reveal the invading organism. The Wassermann test aids in diagnosis of syphilitic conditions. Much has already been accomplished in the application of the complement fixation test to obscure chronic gonococcus infections. In gonorrheal inflammations the focal reaction following the use of gonococcus vaccine is generally pathognomonic. Abderhalden test may indicate recent or extra-uterine pregnancy. In tuberculous infections the bacillus may rarely be found in uterine secretions. The biological tests for the presence of this infection aid greatly in determining the nature and the location of disease, by general, local and focal reactions. The exploratory operation is warranted where other means fail and the symptoms are acute or grave. A differential diagnosis in cases of suspected appendicitis is important because of differences in surgical procedure.

The use of the Roentgen ray in diagnosis may be of value. Relative temperature, respiration and pulse records aid. A leukocyte count will show in recent cases or in acute exacerbation of old cases an increase to fifteen or thirty thousand or more. Both leukocyte count and temperature are likely to be higher in puerperal than gonorrheal cases.

DISCUSSION

DR. KETCHAM: Diagnosis is important. Complement fixation for gonorrhea has been tried out and definite results are reported, making obscure cases diagnosable. The Abderhalden test is another aid along this same line. Cases can be determined in two weeks pregnancy.

DR. FERGUSON: Many cases of pelvic inflammation follow delivery, abortion and miscarriage. Few cases follow hospital delivery, and they are infected when brought in. The average practitioner is not careful enough. The curet is used too promiscuously. Should never be used when gonorrhea is present. Blood cultures are slow for practical purposes in puerperal infection. A smear from endometrium will show streptococcus if it be present. It is all important to exclude this organism.

DR. O. G. PFAFF: Accuracy in diagnosis is not perfect. Accurate history is first necessary and should be recorded when taken. Physical examination is always necessary. Laboratory methods then are taken up. Early diagnosis is indispensable. Cited case of child infected and after running over a year was cured by vaccine administration in two weeks. Laboratory aids prognosis as well as diagnosis. Case cited where pelvic abscess showed colon bacillus which aids future treatment. Gonorrhea is the arch enemy of the human pelvis. Many innocent women become victims and go to the operating table as a future result. More education of laity will help lessen this curse.

DR. BRAYTON: Keyes maintains effectiveness of gonorrhea lasts two years in female and five years in males. Ninety per cent. of pelvic inflammation is gonorrheal. France has lowest birth rate of any nation.

DR. JAEGER: Several years ago I stated in this society 25 per cent. of pelvic inflammation were gonorrhea, and it was disputed by our best men. Is there a pure gonorrheal disease? Most cases become prominent on account of a mixed infection.

DR. NOBLE: A field not touched on is the class of cases which have been treated for various things—digestive disorders, rheumatism, neurasthenia, etc., and not cured. Failure to get proper history is responsible for failure of proper diagnosis. Originally there was a pelvic inflammation from which resulted a more or less general adhesion of abdominal and pelvic viscera. All intestinal functions being impaired, the patient becomes a nervous wreck.

DR. KIMBERLIN: A correct and early diagnosis is more and more impressed on me. Many cases of pelvic inflammation are infected young. The general practitioner must be on his guard. The psychic element is present in so many cases and must be watched for. The neurologist finally gets a large percent. of such cases.

DR. STERNE: Patients handed from doctor to doctor become subjects for neurologists. They become skeptical, doubting, and it is easy to see why one's mind becomes diverted. Too many cases are not diagnosed at all. Do not rely on any one thing in diagnosis.

DR. SHIMER: Many specimens are not properly taken. Not enough care taken in finding cause of these cases. We blame gonorrhea too much. Our technic is faulty and women suffer thereby.

DR. BERNAYS KENNEDY: There is too much curetting. The practice of midwife and practitioners show equal number deaths in obstetrics. The practitioner is more careful and would have lower mortality if he would let the curet alone.

DR. SCHWEITZER (closing): Complement fixation test for gonorrhea became satisfactory after tried long enough to perfect technic. History of case is important. Roentgen ray seems not to be used to a very great advantage in these cases.

Dr. Brayton showed a specimen of foreign body (bone from dog's penis) recently removed by Dr. Charlton from a bladder.

Dr. Alburger reported an autopsy on man brought to City Hospital diagnosed as cerebral hemorrhage. Epidemic cerebral meningitis was found to be cause of death.

The president announced the committee on permanent home as follows: Drs. A. B. Graham, chairman; Goethe Link, R. O. McAlexander, John Kolmer, O. G. Pfaff, Frank Wynn, H. A. Jacobs, T. C. Kennedy, R. S. Chappell, T. V. Keene, E. D. Clark, W. B. Kitchen, T. G. Dugan, H. E. Gabe, C. D. Humes, David Ross, H. H. Wheeler, O. N. Torian, S. J. Hatfield and E. DeW. Wales.

Meeting Adjourned. ALFRED HENRY, Secretary.

Meeting of March 17, 1914. Washington Hotel

Meeting called to order by president. Reading of minutes dispensed with. Drs. C. E. Woods, Frank A. Brayton and P. H. Weeks were elected to membership. Attendance 84.

The following resolution introduced by Severance Burrage was carried unanimously: Be it resolved by the Indianapolis Medical Society that we indorse the efforts of the Marion County Association for the Study and Prevention of Tuberculosis to obtain a Marion county tuberculosis hospital under the provisions of an act passed at the last session of the Indiana General Assembly.

PROGRAM

"Technique for Making Coverslip Preparations from Urine," by Dr. W. T. S. Dodds.

Fill the centrifuge tubes with urine, add a saturated sodium carbonate solution to an alkaline reaction. place in the centrifuge as soon as precipitate begins to form, and centrifuge at the rate of fifteen to thirty revolutions a second for twenty minutes. When the precipitate is all thrown down, decant all the clear fluid. Fill up the tube with distilled water and then add enough acetic acid to dissolve all the precipitate. Centrifuge again at the same rate until you have thrown down all the flocculency. This last precipitate which is washed can be put on a cover slip, and fixed in usual manner. The urates and uric acid crystals which are thrown down in ordinary centrifugal specimens disturb the fixing of the bacteria and cells on the cover slip and it is necessary to eradicate this difficulty. Consequently we have used alkaline solution to dissolve them and it serves the purpose well. It dissolves these crystals which are insoluble in water or alcohol and forms a precipitate of phosphates and carbonates which carry down in the process of centrifugalization the bacteria and cells for examination. The acetic acid dissolves the phosphates and carbonates and after centrifuging you have left the bacterial and cellular elements which are easily fixed in the usual manner. The question of differentiation by staining is not affected, whatsoever, and we are still compelled to use ordinary staining technic and judgment in determining the bacterial and cellular elements found. This technic delivers more bacteriological and more pathological tissue to the cover slip than any other which we have used.

Report of Cases: Pituitary Extract in Obstetrics, Dr. J. W. Carmack.

The five most interesting of a series of thirty-eight cases were reported, in which Pituitary Extract was

used before labor was completed. The conclusions were:

1. Pituitary extract is a valuable addition to the obstetric bag of any one who will use judgment in its administration.

2. It is of most value as a stimulant to uterine contractions after delivery. Preventing hemorrhage, a prolonged uterine discharge, and most important to my mind a heavy partially contracted uterus which persists so frequently. This result was the most constant one noted in these cases.

3. In cases of uterine inertia there is little recourse other than to forceps or Cesarean section, and with the gratifying results obtained it seems that Pituitary Extract must be recognized as invaluable here.

4. In prolonged labor due to a slightly contracted pelvis a large child or the less serious malpositions, if given after cervical dilatation is complete or nearly so, it will certainly prevent the use of forceps a great many times and do the work with less damage.

5. As Pituitary Extract causes a decided rise in blood pressure it must be given cautiously if at all in renal or cardiac complications.

6. A muscular stimulant as powerful as this can cause a laceration of any degree, even a rupture of the uterus.

7. Careful examinations before and during labor must be made in order to use this preparation intelligently.

Paper: "The Several Air Sinuses of the Base of the Skull and their Relation to Local and General Disease," Dr. John F. Barnhill.

Dr. Barnhill demonstrated by means of lantern slides of sections of the skull, most of them original, showing the great extent of these sinuses and their intimate relation to the structures at the base of the brain. By means of dissections, photographs and the use of millimeter paper for the purpose of computing the comparative area of the sinuses exposed to intimate contact with the dura mater, it was thereby demonstrated that in some skulls the frontal and ethmoidal sinuses lie in almost immediate contact with the dura, in the anterior cranial fossa, in more than two-thirds of its entire extent. In the middle fossa the underlying air spaces occupied an area of five to seven, while in the posterior fossa the proportion of cellular area to non-cellular area was one to four. The likelihood of brain complication was pointed out should sinus infection take place in such an individual. The frequency of sinus infection and resulting brain involvement was shown by statistics. Slides were further shown giving the very intimate relation of some of the basilar air spaces to the optic apparatus, and the causes of certain eye affections were objectively demonstrated. The relation of the maxillary sinus to the teeth, and of the sinus and the sphenoid to Meckel's Ganglion and branches of the infra-orbital nerve were shown and the effect of infection of this nerve through sinus disease, with resulting neuralgia or "tic," was pointed out. That states of general infection are frequently the result of both acute and latent sinus empyema was pointed out and emphasized.

DISCUSSION

DR. HOOD: It is not surprising that the orbit is often implicated in these cases for as has been shown so clearly, they almost surround it. The bony wall is not infrequently lacking for a space particularly between ethmoid and orbit. The fundus findings do not help to an early diagnosis because changes here are

lacking or insignificant. If the optic nerve is involved, it is usually a retrobulbar neuritis and fundus changes are late in this affection. The orbital signs to be looked for are pain on rotating the eye and on pressing the globe backward, limitation in the action of those muscles which lie near the point of entrance of the infection and offer a degree of exophthalmia. There is one disturbance of vision which is early and does help to a diagnosis; that is central scotoma for red and often for green. This is due to the early effect of the neuritis on the maculo-papular bundle of fibers which supply the region about the macula, and which are most highly organized and sensitive to insult.

DR. HUTCHINS: To bring about efficiency in children interest in the air spaces at base of skull has been aroused. They are the source of nasal infection. Low grade infection in these spaces really give more trouble. Headache, lassitude, lapses of memory and dulness are some of the results. Many psychic cases are the outcome. The toxins are taken up and disseminated by lymphatics. These spaces are closely connected which enables infection to spread easily. When only cervical glands show infection the trouble is local.

DR. EARP: The essayist has shown the cozy corner of obscure infection. Among many other diseases rheumatism can be traced to infection of the spaces around base of skull. It seems to be the general opinion that pituitrin is not serviceable in premature cases and that it cannot supplant ergot in uterine hemorrhage. It may however so sensitize the uterus that possibly such an agent may be more efficient. Certain heart lesions we know do not mitigate against labor, yet if they exist pituitrin is probably contraindicated.

DR. DODDS: Method of preparing cover slip smears from urine is the best I have seen. In regard to Dr. Carmack's paper, nearly all journals report the use of Pituitary Extract. It should not be given in cardiac and renal diseases. Physical and urine examinations must be made.

DR. JAEGER: Pituitary Extract is a great aid in obstetrics if properly used. Should never be used except in full dilatation. Neither should it nor ergot be used in third stage. Doctors become too impatient and use too radical means.

DR. CUNNINGHAM: Cited a case in which there was long and tedious labor, and after resting patient with morphin Pituitary Extract was administered, the uterus contracting so vigorously as to appear dangerous. Delivery was soon over and patient did well for ten days. Owing to some family disturbance there suddenly appeared a severe hemorrhage which seemed as if it would result fatally. Was extreme overwork of the uterus ten days before responsible for this condition?

DR. JACKSON: The field is already narrowing the use of pituitin. A case was reported in which the uterus was ruptured. Cervix should be soft and offer little or no resistance. Should not be used except as delivery is to be immediately. Second stage and immediate delivery will be the field I think.

Meeting adjourned. ALFRED HENRY, Secretary.

Meeting of March 24, 1914. Washington Hotel

Meeting called to order by First Vice-President Dr. Wales. Reading of minutes dispensed with. Attendance 85.

PROGRAM

Case Report: Appendicitis Simulating Gastric Ulcer, Dr. Paul F. Martin.

Case of J. D., aged 25, motor car tester, single, usual diseases of childhood, no other illnesses, denies venereal history.

Present complaint: Chiefly paroxysmal epigastric pain, nausea and vomiting. As a rule symptoms aggravated usually one-half to one hour after taking food. Vomitus contains blood. Three months before admission to hospital laparotomy had been done for gastric ulcer. No causative findings; symptoms failed to subside even persisting with increased severity.

Status Presens. Subjective history confirmed; pain localized in epigastric region; slight abdominal muscular rigidity. Right rectus rigidity not perceptibly prominent. Subjective manifestations referable to appendix absent. No abdominal tenderness on palpation over McBurney's point unless pressure of examining hand was combined with contraction of psoas muscle by flexing thigh with leg in extension. Phenomenon suggests retrocecal position of diseased appendix which was confirmed at operation. Urinalysis negative. Gastric juice analysis normal. Radiographic plates of interest.

Paper: "The Diagnosis of Gastric Ulcer," Dr. A. B. Graham.

Gastric symptoms form a considerable proportion of the pathologic states with which every practicing physician has to deal. It is an exceedingly easy task to make an offhand or snapshot diagnosis, but it is an exceedingly difficult proposition to prove some of these diagnoses. Notwithstanding the progress which has been made in the diagnosis and treatment of gastric lesions and gastric symptoms, we are at the present time passing through a stage of seemingly restlessness, a feeling of unrest as to our diagnostic ability, due wholly to the differences of opinion on the part of the specialist, the general practitioner, and the surgeon. The first and most important factor in the consideration of diseases of the stomach is the making of an accurate anatomic, physiologic and etiologic diagnosis. It is not the purpose of the writer to assist in the erroneous movement of divorcing gastric lesions and gastric symptoms from the field of internal medicine, to which it rightfully belongs. Important, indeed, is it for one treating gastric lesions or symptoms to be well versed in internal medicine and pathology. It is also true that no one method or procedure is complete in itself, and it is only by the employment of various methods and procedures and the correlating data, that an accurate diagnosis may be made. Radiology should be employed as an aid to, and not a substitute for the ordinary methods of diagnosis. Before undertaking any treatment whatever of any gastric lesion or symptom, the physician should exert every effort and, if possible, ascertain the true etiology. If his examination and investigation, no matter how carefully and thoroughly made, are confined to the stomach itself, he will not infrequently overlook the real causative factor of the gastric pathology. If he is content to limit his investigation to the stomach, believing that the gastric symptoms are due to a primary gastric pathology he will meet with failures in no small percentage of cases. To this end the first requisite in all cases of indigestion is to realize that we have to do with a patient, not merely with a stomach.

DISCUSSION

DR. HADLEY: The diagnosis of gastric lesions has not been written about much. Literature shows this to be true. Surgeons often lay too little stress on diagnosis before operation. Cited case operated on very slight examination with no positive diagnosis. Dr. Graham's paper certainly will induce one to make a more careful attempt to make a definite diagnosis.

DR. NOBLE: Gastric symptoms in scope should be associated with headache, constipation and epilepsy. The position of stomach, subject to change of specific gravity, an organ which receives myriads of insults and is associated with all the changes of all other systems of the body and many other things tell us this organ is a very dependable one. To make a gastric diagnosis one must know chemistry, the eye, the kidneys and the nervous system. Relative to exploratory laparotomy it is often difficult to make a diagnosis even with one's hand on the diseased organ. There is good reason for perhaps most explorations. A good surgeon cannot know enough in the various fields to be a good diagnostician.

DR. SOWDERS: Importance of a general survey in making a diagnosis in gastric lesions has been emphasized by Dr. Graham. In studying the stomach one must consider the circulatory and nervous systems, the kidneys, liver and intestines. I believe it is not necessary to call a surgeon for a diagnosis. The specialist and practitioner are the ones to make it. The general practitioner is not careful, is too dependable and should do more of this work looking toward a diagnosis. There should be a closer relation between the general practitioner and the surgeon. Exploratory operation should be advised after all other means have been exhausted. We ourselves are to blame for many patients falling into hands of Christian Scientists.

DR. LINK: Dr. Graham's paper is timely and I should like for the essayist to tell us more in detail about the hyperchlorhydrias and achylas. More team work and more effort to fasten a definite diagnosis in stomach lesions is hoped for in the future.

DR. O. G. PFAFF: The paper seems to cover the question of a general diagnosis. The symptoms of gastric lesions may be in evidence with no stomach trouble at all. We must not overlook referred pain. Cancer of breast causes atrophy of stomach. A prolapsed ovary may produce symptoms of gastric ulcer. Cited case of three different diagnoses; namely, appendicitis, cholelithiasis and gastric ulcer. An operation showed a belly full of blood from ectopic gestation. An incision as a working basis is not an exploratory operation, if there is present a general condition.

DR. COLE: There have been great advances in Roentgen ray studies. It is becoming a great aid in diagnosis. Dr. Carman of Rochester has raised positive diagnosis in gastric cancer from 60 to 96 per cent. Roentgen ray has been put third in diagnostic value in cancer. Carelessness in diagnosis is not practiced in Indianapolis only. It reaches to London to my knowledge. We are getting more team work and need it.

DR. STERNE: As routine practice our profession does not study its cases. Too little time is given. Everything should be known that is possible before operating. More can be found out before operation than is sometimes done. Abdominal contents should be handled with tenderness. Cited case to be operated

for duodenal ulcer who proved to have a central nervous lesion from an old lues.

Dr. Graham closed the discussion.

Meeting adjourned. ALFRED HENRY, Secretary.

BLACKFORD COUNTY

The regular meeting of the Blackford County Medical Society was held March 27, at Hartford City, with nine members present.

There having been no meetings during January and February, the minutes of the December (1913) meeting were read and approved as read.

Dr. Charles A. Sellers reported a case of pellagra in a male child 2½ years of age.

Dr. Fernande Hachat was elected treasurer to fill the unexpired term made vacant by the resignation of Dr. H. C. Davisson.

Blackford County has now a membership of eighteen. The local society dues for the ensuing year were placed at \$2 per member.

Adjourned. CHARLES A. SELLERS, Secretary.

DELAWARE COUNTY

At the regular meeting of the Delaware County Medical Society held at Muncie, March 6, Dr. C. Melvin Mix read a paper entitled "The Surgical Game," from which the secretary gleaned the following abstracts. It may be said in passing that Dr. Mix, having passed from surgical intern, assistant surgeon, operator in general hospital, to chief surgeon in a private hospital is in a position to draw conclusions that are worth respectful consideration.

Surgery is a game, for we play the patient against his disease. It is a contest between skill and a mighty and determined force. The true surgeon is like the golf player or sharp shooter, always endeavoring to perfect his score. He may never reach a "possible" but he never loses his ambition to attain the high mark. Surgeons are divided into classes or groups.

1. The surgical artisan for art's sake. He counts his time in minutes and seconds and has a reputation for getting his patients off the table in the least possible time.
2. The scientific surgeon who is interested principally in pathology, even though it be post mortem pathology. He considers his patients as "material."
3. The surgeon proud of his achievement for self sake. He boasts of so many hundreds of this or thousands of that. His operations are replete with grand stand plays, and the benefit to the patient is often incidental.
4. The surgeon whose aim is to reduce mortality; the welfare of the patient is his chief consideration. He is skillful and can work with the utmost speed when the emergency makes it necessary, yet believes in deliberation when it is essential to good results, and acts accordingly. He constantly bears in mind that the recuperative ability of his patient is pitted against the activities of the disease. He realizes that the dead pathology of the past has given way to the living pathology of to-day. Vital problems are not confined to curing the patient but include curing the pathology. Ideal surgery must never add to the burden already carried by the patient. Three of the formidable items that must be considered at all times, either of which is likely to prove an incubus, are shock, traumatism and hemorrhage; therefore we must give special attention to the anesthesia, the method and

technic. Both chloroform and ether are lipoid solvents, and the effect on the brain cells is not free from harm. The damage also extends to the liver, kidneys and other viscera and organs; while nitrous oxide contributes practically nothing to the injury of the patient. Every severe ordeal, no matter what its nature, leaves a permanent impress. Typhoid fever, fright, accident or an operation may account for a neurasthenia. One of the greatest disadvantages of a local anesthesia is that it fails to eliminate the element of fear which is sometimes such an important factor; yet it is most instructive to the surgeon. It assists him to determine sensitive and nonsensitive areas, warning him to limit his manipulations to necessary pain. He learns that blunt dissection is more painful than clean cutting; that the parietal peritoneum is extremely sensitive; that the visceral layer can be pinched with impunity, but slight traction elicits pain. Surprising facts appear. In a desperate case it is feasible to open the abdomen, bring down the stomach and do a gastro-enterotomy if there is no traction on mesenteric attachments. Organs and tissues protected from trauma in the evolution of the race, such as the brain, thoracic viscera, etc., are poorly supplied with nerves and show little pain reaction; on the other hand cutaneous and mucous surfaces continually exposed to external trauma are sensitive to an acute degree. A wise provision of nature to warn us of danger. The use of anesthesia should be not only to eliminate the knowledge of pain from the objective consciousness but to block any message of pain that may be started toward the subconscious mind. This may be accomplished by the use of local anesthesia accompanied by the use of nitrous oxide. The three great principles that must apply to every surgical operation are that it be as nearly aseptic, bloodless and shockless as possible.

Dr. L. F. Schmauss of Alexandria, was present and discussed the paper at length. He believes that the surgeons connected with private hospitals are the ones most likely to belong to the fourth group mentioned above; for the success of an institution depends on its reputation to get satisfactory results. The ability to promptly rally and regain consciousness after an operation under local anesthesia and nitrous oxide is not always an unqualified blessing to the patient; the later reaction is sometimes most annoying. The stage of post operative stupor is sometimes an advantage.

Drs. O. E. Spurgeon, W. W. Wadsworth, D. M. Green and others took part in the discussion.

Adjourned.

H. D. FAIR, Secretary.

DUBOIS COUNTY

The Dubois County Medical Society met at Jasper in Library Room of the Dubois County Courthouse.

The meeting was one of those extraordinary ones as regards attendance—every member in the county was present. One could see that the Dubois County Society is one of those "live ones," and the hatchet of petty jealousies forever buried, as you could not find a more jovial and congenial crowd of men, every one having a good word for his fellow practitioner.

The president Dr. Louis Lukemeyer, called the meeting to order.

Minutes of previous meeting were adopted.

The program consisted in the reading of a paper by the secretary, Dr. E. A. Sturm, Jasper, whose subject was "Are Your Services Worth the Price?" The writer

in his paper emphasized the principle of thoroughness in our efforts; touching strongly on the points of asepsis in its every detail, urging more accuracy in diagnosis, using all the late appliances and the laboratory methods in conjunction with the older methods as an aid to attaining such, and especially emphasized the diagnosis of tuberculosis in its incipency. Also lightly mentioned points on infant feeding. Enjoined us to be more thorough, practical and scientific, not forgetting medical ethics and "live and let live" principles.

The discussion which followed was a very enthusiastic one and every member entered it with a vim. Many points of interest were touched upon. The discussion was a rousing success.

The next meeting will be held at Huntingburg on the third Tuesday afternoon in April. The program will be rendered by Dr. O. A. Bigham of St. Anthony, and Dr. Fred Rust of Holland. The subjects of the program will be announced later. All the members are again earnestly and cordially invited to come. Let's get together and remain so!

Adjourned.

E. A. STURM, Secretary.

ELKHART COUNTY

The regular March meeting of the Elkhart County Medical Association was called to order at 8 p. m. by President Ash, in Assembly Hall of Elkhart Public Library. Minutes of the February meeting read and approved. Bills to cover the expense of the Burton Myers lecture on Killikak Family were allowed.

Dr. Udo J. Wile, Professor of Dermatology and Syphilology, University of Michigan, Ann Arbor:

Clinic: Case 1.—Chronic leg ulcer. Brought out points in differential diagnosis between (1) varicose, (2) T. B., (3) specific, (4) trophic ulcers. This case is one of varicose and specific combined. Luetic ulcers have sharp, well defined edges—punched out appearance—tend to spontaneous healing. Varicosities in this case make healing very slow. There is connective tissue hyperplasia around edge of ulcer with more hyperplasia and consequent scar contraction closing off blood supply. There is need of support for veins. Recommended application of Unna's Zinc Oxide and gelatin dressing from foot to knee.

Dr. Wile then gave a lecture on the subject, "Some Important Points in the Diagnosis of Early Syphilis." The fate of a case of syphilis is determined by the treatment received during the first year. Tertiary syphilis is the result of lack of proper early treatment. Every sore on genitalia is suspicious. Differential diagnosis of (1) chaneroid, (2) chancre, (3) herpes, (4) scabies, (5) carcinoma, was given in detail.

Thirty per cent. of people in second stage of the disease have syphilis of the central nervous system without symptoms of same—as is proved by repeated examination of spinal fluid of such patients. Sixty per cent. of syphilitics have symptoms which in many respects closely resemble purely medical conditions, namely, anemias, etc., while the other forty per cent. feel perfectly well. In the treatment of syphilis Dr. Wile recommended repeated injections of mercury; of the corrosive sublimate 1/15 to 1/8 gr.; of the tannate, 1 to 3 grains; of salicylate, 3 or 4 minims; of the following treatment intramuscularly once a week, salicylate of mercury, 6 parts, lanolin, 1 part, olive oil, 15 parts. As a local application to primary

sores or to abrasions of skin which are caused by an instrument carrying spirochetes, there is nothing better than calomel—in the form of 33 1/3 per cent. ointment. French soldiers are supplied with this ointment to use as a prophylactic after possible exposure. Says that biniodide is unsatisfactory in that when given in sufficient quantity to do any good the gastric and renal symptoms are endangered. Recommends spinal puncture in addition to Wassermann as a routine to determine cure. Intraspinal injections of neosalvarsan are being given by Dr. Wile, but as yet they are attended by more or less risk.

Adjourned.

JAMES A. WORK, JR., Secretary.

FULTON COUNTY

MEETING OF JANUARY 6

The Fulton County Medical Society met in regular session January 6, in the City Hall at Rochester.

Minutes of previous meeting read and approved.

Dr. Bowman presented a case of Erythema of a persistent character. All members took an active part in the discussion of the case.

The following officers were elected for 1914: President, Dr. H. W. Taylor, Rochester; vice-president, Dr. A. L. Bowman, Talma; secretary-treasurer, Dr. E. L. Waite, Rochester; censors, Drs. M. O. King, Rochester, A. L. Slonacker, Leiter's Ford, and F. P. Bitters, Rochester.

Adjourned.

EARL L. WAITE, Secretary.

MEETING OF MARCH 3

The Fulton County Medical Society met in regular monthly session in City Hall at Rochester, March 3, with twelve members present. Meeting called to order by President Dr. H. W. Taylor. Dr. S. C. Loring of Plymouth, was a visitor.

Minutes of previous meeting read and approved.

Dr. E. Clark of Indianapolis, read a paper on "Care of Surgical Cases Before, During and After Operation." Dr. Clark emphasized the necessity and significance of preparation of the patient previous to operation, which is the first essential in all surgical work. He also spoke of the importance of selecting a competent anesthetist in all cases; recommended ether as a much safer anesthetic than chloroform, unless there were contra-indications for ether, and mentioned gas as being good, especially when administered by one who was experienced in its use; gave minute description of every detail in the technic of preparing the surgical field, and suggested the use, in some cases, of local anesthetic, in conjunction with the general anesthetic, with one-fourth of 1 per cent. of novocain in normal salt solution injected into tissues before making incision. Shock is brought on by toxic material in the blood, rough handling, and trauma; thus, avoiding these as much as possible, the patient gets along with the least amount of trouble. Dr. Clark said that a free and liberal incision is the best surgery in most instances, and explained very fully his technic in the closing of an abdominal incision. The after care of the patient was given due consideration, and some new thoughts brought to the notice of the society.

A general discussion followed resulting in bringing out many good points by various doctors present to the mutual good of all.

Adjourned.

EARL L. WAITE, Secretary.

GRANT COUNTY

The Grant County Medical Society held its first quarterly meeting of the year on Tuesday evening, March 24. Twenty members of the society, with our guest Dr. A. C. Kimberlin of Indianapolis, sat down to dinner at Hotel Marion at 7 o'clock.

At eight o'clock adjournment was had to Marion Public Library where the regular session was called to order by President G. D. Kimball. By common consent the regular order of business was transposed to allow Dr. Kimberlin to make his address and finish in time to catch his train.

Dr. Kimberlin chose as his subject "Goiter or Hyperthyroidism." He spoke on this subject for an hour in a most interesting and instructive manner, laying most stress on diagnosis.

The board of censors reported favorably on the application of Dr. W. H. Braunlin of the National Military Home and he was elected a member of the society.

Dr. J. C. Ross of Gas City and Dr. J. D. McKay of Marion were reinstated.

Dr. Sproul of Warren, Huntington County, one of the early members of this society was present and addressed the meeting briefly.

Society adjourned. J. E. JOHNSON, Secretary.

JASPER COUNTY

The Jasper County Medical Society this year holds monthly meetings, each member acting as host for one meeting. A general subject is selected by the host, and sub-topics or a certain portion of the subject assigned to each member. Short papers are read and then during a luncheon, furnished by the host, an informal discussion is indulged in. The society met with Dr. English, the president, in February and with Dr. Hemphill in March.

A price list stipulating \$1.50 and \$2 for day and night calls in the city; \$1.50 for the first mile and 60 cents for each additional mile out, with a dollar extra for night calls in the country, was agreed on at the March meeting.

The following program has been arranged for April: A Study of the Ductless Glands. (1) The Thyroid—Anatomy and Physiology of the Glands, Dr. M. D. Gwin; Paper on Goiter, Dr. F. H. Hemphill; Paper on Exophthalmic Goiter Exclusive of Treatment, Dr. A. R. Kresler; Treatment from the Medical Standpoint, Dr. E. C. English; Treatment from the Surgical Standpoint, Dr. C. E. Johnson; Paper on Myxoedema and Cretinism, Dr. I. M. Washburn; Thyroid Extract in Obesity, Dr. A. P. Rainier. (2) The Pituitary Gland—Uses of the Pituitary Extract, Dr. Emil Besser. (3) The Suprarenal Gland—Paper on Addison's Disease, Dr. E. N. Loy.

LAKE COUNTY

The regular meeting of the Lake County Medical Society was held at the Gary Commercial Club, Thursday, March 12, at 7 p. m., Dr. Iddings presiding. There were nineteen members present.

Applications for membership were received from Drs. B. M. Jewell of Hammond, and R. W. Johnson of Lowell. Report of board of censors was favorable and the secretary ordered to cast the ballot in favor of the election of the applicants.

Dr. Weis reported a case of fracture of the upper jaw, and Dr. Propper, a case of Pott's Disease.

Dr. Lauer presented a paper on "The Legal Status of the Physician and Some Others." Discussed by Drs. Metcalfe, Weis, Evans, Propper and Iddings.

Adjourned.

E. M. SHANKLIN, Secretary.

ABSTRACTS

TONSILLECTOMY

H. C. Todd, Oklahoma City (*Journal A. M. A.*, February 28), criticizes the efficiency in some cases of the much-recommended Sluder tonsillotome. It is, he says, similar to the old McKenzie instrument, but modified in some respects and so constructed as to be used in a reversed position. This undoubtedly gives it a decided advantage, as it engages the tonsil more readily and greater leverage is obtained. The chief advantages and real value, however, of the instrument are found in the new points of operative technique introduced by Dr. Sluder. There can be no doubt, Todd says, but that he has discovered a very valuable aid in the complete removal of tonsils by the tonsillotome alone in his method of dislocating the gland forward and upward and pushing it through the oval aperture of the instrument by pressing it against the inner surface of the mandible. Even with these advantages he thinks the claims for the instrument have been a little too enthusiastic. After making thorough tests with the original instrument and with Dr. Ballenger's modification of it, he has come to the belief that it is insufficient for a large percentage of tonsils that need to be completely removed, among them tonsils that have been previously "clipped," leaving a broad flat base which has been invaded by frequent infection and is firmly bound by adhesions and partly buried by the pillars of the fauces and folds of the soft palate. Such a condition, he says, is not rare. There is also a soft friable flat tonsil made up largely of crypts and pockets filled with a soft caseous infected material which produces a continual inflammatory condition. These tonsils crush almost like jelly and are difficult to engage in the Sluder tonsillotome. These two classes are of special importance. While recognizing the improvements made by Dr. Sluder, he says, the operation of removing the ordinary hypertrophied tonsils is comparatively so easy that the method is of slight importance. The Sluder method no doubt facilitates the removal of many tonsils which heretofore the tonsillotome could not well remove. If the technique is not available in all cases, however, it cannot be called a universal one. There is such a one, he says, with the snare, which, while a little more difficult to master, can be used in every case. While this is familiar, he describes it as follows: "Place the patient in the dorsal position with the head slightly lowered. Obtain complete relaxation by ether anesthesia and thoroughly illuminate the throat by a good headlight. Grasp the tonsil firmly and deeply with a curved tenaculum; lift the gland from its bed and dissect it from the surrounding structure with a right-angled knife, or scalpel, slip a snare over the tonsil down to its base and remove it. The work can be done with the most difficult tonsil in less time than it has taken to describe it, and the technique is of equal use in all cases. With such a simple, complete and universal method as the snare operation affords, it is difficult for me to understand why many seem to be earnestly searching for some other method and willing to try a new instrument and adopt another technique."

"HUMAN VIVISECTION"

R. M. Pearce, Philadelphia (*Journal A. M. A.*, February 28), takes up and refutes in detail the falsehoods and gross misrepresentations published by the antivivisectionists as regards "human vivisection." After refuting their statements and arguments, he says: "Three courses are open to the medical profession: 1. To refuse absolutely to try any new drug, new operation or new means of diagnosis, because it would be an "experiment" and an example of "human vivisection." 2. To test new ideas, suggestions and methods at once on man. 3. To make the first tests and experiments on animals and then if found useful and not dangerous to apply them, with every possible safeguard, to the relief of man. If the first course were followed, all progress would cease and all medical and surgical treatment would become stereotyped. The second involves a moral responsibility which few conscientious physicians would care to assume. The third has a basis in a definite ethical principle. Which would any sensible man or woman choose as a guide to medical progress?"

POLIOMYELITIS

An epidemic of poliomyelitis in central Alaska is suggestive as regards the epidemiology of the disease, as reported by R. H. Pierson, Fort Gibbon (*Journal A. M. A.*, February 28). There were a little over thirty cases altogether with four deaths and eleven of the cases came under the observation of the Army surgeons at that place. The epidemic among the human subjects was preceded by one of "distemper" among dogs with practically the same symptoms. There is little probability that the disease was brought from the United States, as similar ones had occurred in the same region before with sporadic cases between. The lives of the natives and those of the dogs, which are their only domestic animals, are closely associated and the dogs are ubiquitous, playing with the children and acting as scavengers. The "distemper" is one of several kinds occurring among dogs, especially affecting young animals. When the epidemic occurs, practically all the animals are affected which have not previously had the disease. Pierson gives the history of the epidemics observed by him and says that there was every opportunity, with the habits of the natives, for the infection by direct contact and ample chance for its transmission by flies. There were three kinds of these, a large one, known as the moose-fly, another similar to the common stable-fly and the house-fly imported from the United States. The reasons for suspecting flies were their abundance about the fishing-camps, the only places where the infection seemed to prevail and to be contracted, and the immunity of the Indians living in other localities. A great many dogs owned by white men had the disease, but no white person suffered, as they were careful in keeping their dogs away from their dwellings, had their houses screened and were generally more cleanly in their habits. The points Pierson brings out in this paper as of interest are the coincident infection of the dogs and the cessation of the epidemic with the first frost, which would suggest insect transmission. While the study of the epidemic was incomplete, it is hoped by him that it may be suggestive and helpful in other epidemics that may occur.

ALBUMINURIA AND LIFE INSURANCE

The more advanced position of modern insurance medicine as regards indications preceding active disease is remarked on by H. W. Cook, Minneapolis (*Journal A. M. A.*, February 28), who especially refers to the prognostic value of slight or transient albuminuria. Inasmuch as reliable history and thorough examination are impossible in insurance work, the test for albumin which might otherwise be frequently neglected, becomes the best single guide to insurability in persons over 40. A thorough history and examination is only possible in large centers and is expensive and time-requiring. That the deductions of life-insurance medical directors frequently differ from those of internists is to be expected, as the basis of their judgment is very different. The insurance man can take for granted that the examinations are more or less incomplete, and while generally the growing clinical opinion that traces of albumin may be discounted is correct, such an attitude toward albuminuria in insurance work would mean disaster. The increasing frequency of cardiovascular renal diseases and its almost constant association with albuminuria, and the clinical experience that albumin in men over 40 means that other symptoms of diseases are discoverable, tend to make home-office urine analysis more and more important. Of course, it is not meant that albuminuria at any age is to be neglected; it should always lead to careful further investigation for more serious conditions. Where it is impracticable to have a home-office urine analysis, much can be done to improve the examiner's work, and Cook strongly recommends Ulrich's modification of the saline acid-heat test, which he describes. He sums up as follows: "1. In applicants over 40 or 45 it is of great importance to determine the presence or absence of a slight albuminuria. 2. The slighter albuminurias are almost constantly overlooked by the average examiner. 3. Apparently, the only way to obtain this very vital information is to have the urinalysis made at the home office, although an improvement may be expected from the recommendation to the examiners of a more delicate and simpler test, such as Ulrich's test."

SHORT-CIRCUITING THE COLON

J. Rilus Eastman, Indianapolis (*Journal A. M. A.*, March 7), says that anastomosis of the caput coli at its lowest level with the rectum as a means of short-circuiting the large bowel presents all the advantages and eliminates many of the evils of the operative procedures now in use. Ileosigmoidostomy does not always drain the cecum, and while anastomosis of the terminal ileum with the rectum is somewhat more efficient, the pus formation at the blind end of the ileum, described by Werelius, may defeat the object of the operation and reversed peristalsis favor retention of fermenting food and bacteria. If the caput coli is anastomosed freely to the rectum at the lowest point possible without traction, the emptying of the cecum is favored at this point, also where direct drainage is most needed. The Murphy button may be used and is here quite safe, as it will be readily discharged here. To insure anastomosis of the most dependent part of the caput coli, the appendix should be removed if it is necessary to secure perfect drainage.

UTERINE RUPTURE

Enlargement of the field of cesarean section is one of the advances in modern obstetrics says L. I. Breitstein, San Francisco (*Journal A. M. A.*, February 28). The operation is being performed now for other indications than contracted pelvis and the results are generally good. The question as to what should be the latter course of cesareanized women arises and the consensus of opinion is that they should not be sterilized. With this question in mind, he reports a case of a woman who had a cesarean section performed at term owing to a large hematoma obstructing the pelvic canal. Subsequently, under his care, she passed through a normal pregnancy and delivery. Still later, however, she came again under his care from a ruptured uterus which was operated on and a dead fetus removed. There were certain peculiar features of the case. There was a comparative absence of symptoms and those present were mild. The patient did not think much was the matter with her at first and sat up and walked about while the intact bag of waters containing the fetus were free in her abdomen and the true condition was not ascertained until the emptiness of the uterus was discovered by the finger through the os. Breitstein discusses the uterine condition in such cases as found in the literature. The rupture may not be in the locality of the scar, but may occur in the uninjured uterine tissue made thin by interference with its circulation. If there is no infection the scar may hardly be ascertainable, but the case is very different if union by first intention does not occur. The following are the conclusions of his paper: 1. A cesareanized woman who gives a history of an infection with a purulent vaginal discharge in the puerperium is a good candidate for rupture of uterus in one of her subsequent pregnancies. 2. The mere fact that a cesareanized woman has delivered herself spontaneously is no reason for believing that she is free from the danger of rupture of the uterus with her future pregnancies. 3. Rupture of a cesarean-section scar generally takes place in a scar resulting from improper wound-healing in the presence of infection. 4. The implantation of the placenta on the site of the scar may so weaken the uterine tissue that it may rupture under the strain and stress of labor. 5. I firmly believe that cesarean section should be limited to those cases in which it is strictly necessary. If there is any possible chance for the uterine wound to become infected, some operative measure for sterilizing the patient should be employed. 6. A cesareanized woman should be in a maternity hospital during the last month of her subsequent pregnancy so as to be under constant medical supervision.

BLOOD TRANSFUSION

V. O. David and A. H. Curtis, Chicago (*Journal A. M. A.*, March 7), describe an apparatus for blood transfusion, an account of which had been published before in *The Journal A. M. A.* (Jan. 7, 1911, p. 35). Two years later Cooley and Vaughan described a similar method, varying only in two respects, namely, the use of a smaller syringe and omission of the petrolatum coat, in which regard David and Curtis consider the method of Cooley and Vaughan inferior. David and Curtis reproduce their former account of the method of its use, and report that they have used it in twenty-two cases on the human subject and found it more satisfactory than other methods.

WASSERMANN REACTION IN DEMENTIA PRAECOX

Following a paper on the Wassermann reaction in dementia praecox (*The Alienist and Neurologist*, February, 1914), Dr. Max A. Bahr offers the following conclusions:

CONCLUSIONS

1. A positive Wassermann reaction of the blood in 32.1 per cent. of cases.
 2. A positive Wassermann reaction of the cerebrospinal fluid in 10.5 per cent. of cases.
 3. Butyric acid reaction negative in all cases.
 4. Increase of globulin content in 2.1 per cent. of cases by the ammonium-sulphate test.
 5. A positive Wassermann reaction in both serum and fluid in 3.1 per cent. of cases.
 6. Increased pressure of the cerebrospinal fluid in 7.3 per cent. of cases.
 7. Pleocytosis noted in 4.4 per cent. of cases.
 8. Parallelism between the Wassermann reaction in both serum and fluid, globulin content by the ammonium-sulphate test, lymphocytosis and increased pressure in one case.
 9. Positive history of acquired syphilis in only two cases and both these contracted the disease after the onset of the psychosis.
 10. Ancestral syphilis in the production of the syphilitic soil is to be considered as one of the etiologic factors in the production of dementia praecox.
 11. Clinical evidence of leptic infection is not necessarily present in dementia praecox, for we are probably dealing with syphilis in an attenuated form.
- I desire to express my indebtedness to Dr. George F. Edenharter, superintendent of the Central Indiana Hospital for the Insane, for his unceasing encouragement of medical research; to the members of the medical staff of our institution for their hearty cooperation; also to Drs. Truman C. Terrell and Ernest D. Martin, pathologist and assistant pathologist, who conducted these serological tests.

INTERLOBAR EMPYEMA

Two cases of interlobar empyema, a rare complication of pneumonia and not described in many textbooks, are reported by F. W. Sinkler, Philadelphia (*Journal A. M. A.*, Feb. 28). He describes the anatomic conditions and remarks that attention was called to this complication by the late Dr. John H. Musser, who advised making careful physical examination over the interlobar septa. If this advice was generally followed, Sinkler says, the true cause of many cases of supposed unresolved pneumonia or supposed lung abscess would be ascertained. The symptoms are those of ordinary empyema, but the physical signs are not so marked, since the amount of pus is smaller and may be deep in the chest. Palpation will probably elicit lessened fremitus over the affected area, and percussion will show impairment of the normal resonance and auscultation an absence of breath sounds over the area involved. The diagnosis should be confirmed by paracentesis. The treatment is by resection of a portion of one or more overlying ribs and by drainage. In the first of his cases there were two unusual phenomena; hiccup, due, he thinks, to pressure on and irritation of the phrenic nerve and cardiac irregularity from pneumogastric irritation. The second case occurred in the course of a typical attack of typhoid fever.

RUPTURE OF THE INTESTINE

Maurice Kahn, Leadville, Colo. (*Journal A. M. A.*, March 7), remarks on the high mortality of intestinal rupture and the manner in which it may occur, and reports several cases observed by himself. The necessity of early operation is especially insisted on, as the surgical technic is fairly successful when early operation is performed. There is no better method of insuring the patient's death than masking symptoms by morphin and waiting for the absolute diagnostic signs of the injury. Hence he gives a detailed list of the symptoms. Shock varies from slight to most profound, and its absence signifies nothing. Vomiting is common, but not invariable, and the more persistent it is the more important. It is due to irritation of the peritoneum, which when sufficient to cause it may be long delayed, especially if the intestinal content is expelled directly into the pelvis. Obstipation is very common, and is not so useful as a sign as we have it in the picture of traumatic or paralytic ileus. Frequent urination has been observed, but it is rare and a late symptom. Pain is usually intense, local or general, more often the latter. It appears early and continues unabated. The difference in patients enduring pain has to be considered in estimating this symptom. The respiration is said to be characteristic and of thoracic type and shallow. Kahn has not seen this early enough to be of value. If present it will be significant, but its absence means nothing. The pulse, at first, is usually slow and gradually and steadily rises, though exceptionally this is delayed. An increasing pulse-rate is a valuable symptom, but it may be too late. The temperature is but slightly elevated at first and not dependable for early diagnosis. Formerly the facial expression was considered of importance, but generally when it is noticed it is too late to be of value. Loss of liver dulness is also a late sign and may be simulated by a marked meteorism. Abnormal areas of dulness may appear from hemorrhage, but otherwise they would be tardy in appearance; as an early symptom local dulness is not of importance, as there would be other characteristic symptoms accompanying it. Rigidity of abdominal muscles is an invaluable sign in a suspected case and is not subordinate in importance to any other. Local tenderness is of great value if superficial injury can be excluded, and its increase in severity and area are rapid in cases of rupture. The longer the time after the accident and the more numerous and marked the symptoms the surer is the diagnosis and the greater the danger to the patient. Once the diagnosis is made, the importance of prompt action cannot be overemphasized. The history may be misleading, but it is still of primary importance, and with it the persistence of the initial symptoms, especially rigidity and pain, are sufficient at least to warrant an exploratory operation.

BLOOD COLLECTIONS FOR CULTURES

F. A. McJunkin, Boston (*Journal A. M. A.*, March 7), after noticing the time-consuming difficulties and labor of making blood-cultures and the need of plating the blood, describes a tube devised for expediting the work in the Wassermann test, in which the blood is run directly into a sterile tube containing oxalate solution to prevent its coagulation. By this apparatus and method a large number of specimens of blood can be obtained with ease and speed. The apparatus is illustrated.

URTICARIA FROM OYSTER PROTEIN

A case of severe urticaria or erythema multiforme combined with urticaria, caused by eating raw oysters is reported by H. H. Hazen, Washington, D. C. (*Journal A. M. A.*, February 28). The patient was treated by staphylococcus and colon vaccines and on account of the definite causal history a test was made with a vaccine made from a fine emulsion of oyster injected under the skin to see whether or not a local skin reaction would occur. Five minims were injected and within three hours the temperature had risen to 102 and a violent attack of urticaria, with general malaise; some nausea and slight abdominal pain lasting two days, followed. The patient apparently suffered because of a definite anaphylaxis against oyster protein to which both the original attack and that experimentally excited some time later were due.

SUGGESTIONS IN EAR, NOSE AND THROAT CASES

Dr. S. H. Lutz, in the *Medical Times* of February, 1914, gives some very valuable general suggestions concerning the management in nose and throat cases. Briefly stated, the more important are as follows: All patients should be instructed to blow the nose wide open or without pressure applied to the sides of the nose. The tendency to close one side of the nose and blow through the other side is one of the most frequent causes of pus being forced into some uninfected place and thus setting up a new focus. Discourage the use of oil in the ear, as it becomes rancid and frequently sets up irritation. If plain hot water had to be obtained on prescription it would be more often used than it is, and the same may be said of rhubarb and soda, which is one of the most valuable medicines in the treatment of nose and throat conditions. Removal of adenoids does not always bring about satisfactory breathing. Look for some obstruction in the nose itself. Frequent colds in the head in children is fairly conclusive evidence of adenoids or some other nasal obstruction. Few children without adenoids have ear trouble in measles or scarlet fever. In frequently repeated attacks of laryngitis or pharyngitis look for gastro-intestinal disturbance. A foreign body in the ear may be the cause of a cough. Adenoids or a foreign body in the nose or ear sometimes cause convulsions in children. When examining a patient's throat, take a good look at the tongue. A brown tongue suggests liver torpor; a red tongue shows intestinal derangement and suggests acids; a white tongue shows gastric disturbances and calls for alkalies.

DUODENAL RUPTURE

A. B. Kanavel, Chicago (*Journal A. M. A.*, March 7), reports two cases of traumatic extraperitoneal rupture of the duodenum which have convinced him that a toxemia, other than bacterial, is a factor in the mortality. The ordinary type of death from peritonitis was lacking, and post-mortems showed no general peritonitis, such as might have been expected. The diagnosis of such cases is largely based on the excessive local tenderness and pain with nausea and vomiting shortly after the injury. The treatment must be operative. The mortality is much higher than rupture of any other part of the intestine.

THE HEART IN PNEUMONIA

R. F. Fennell, Guntersville, Ala. (*Journal A. M. A.*, March 7), suggests the importance of the pressure on the pulmonic circulation and the aided labor of the heart in pneumonia as a point of special importance in the treatment of this disease. Hence the guide as to the immediate condition of the pneumonia patient is the quality of the pneumonic second sound of the heart, heard best in the second interspace just to the left of the sternum. So long as the sound of the pulmonary valves is accentuated and imparts a snapping quality, we may rest assured that the right heart is doing its work well. When this is lost and cyanosis supervenes the right heart is becoming incompetent, and it is necessary to reduce the pulmonic pressure for its relief. Strychnin aggravates such a condition, and to give the heart a chance to recover, he advises the patient being placed in a semirecumbent position and nitroglycerin, 1/100 grain, given every two hours if necessary. This should be discontinued if any signs of edema of the lung appear and 1/100 grain of atropin given instead, with due caution after three doses. The whole body except the head should be enveloped in a mustard pack and artificial heat applied. The patient should remain in the pack until the skin is red and the pack repeated as often as needed to retain redness.

ULTRAVIOLET LIGHT

The value of ultraviolet light in certain skin affections has been demonstrated, but it has not been shown that its benefits are due to direct germicidal action, but may be due to irritant action on the tissues. Since the cornea is relatively transparent to ultraviolet light, it follows that if it should be found impossible by this means to destroy bacteria within corneal tissue without injuring it, the same negative results might be expected with other tissues. To throw light on this question, F. H. Verhoeff, Boston, reports (*Journal A. M. A.*, March 7) the results of an investigation made by Louis Bell and himself on the effect of ultraviolet light on the normal eye, advantage being taken of the powerful light sources and apparatus. He reviews Hertel's experiments and results, pointing out wherein he thinks they may be erroneous. The light sources used by him were chiefly the magnetic arc and the quartz mercury lamp, but the cadmium zinc arc used by Hertel was also tested. "A number of experiments were first made by injecting staphylococci or pneumococci into the corneas of rabbits, and after twenty-four hours exposing the resulting abscesses to the ultraviolet light. Healing did not seem to be hastened, but since recovery ultimately occurred, as it did also in the control eyes, these experiments are not regarded as sufficiently conclusive and are not given in detail." Other experiments, however, which are detailed are more conclusive. The general results prove that ultraviolet light cannot under any conditions destroy bacteria within the cornea, even when that is perfectly transparent, without severely injuring the corneal tissue. The exposures would have to be impracticably prolonged to destroy bacteria in corneal abscess or ulcer, even with the sacrifice of corneal tissue, and the heating effect would exceed the ultraviolet light chemical action. It is doubtful also whether ultraviolet light of such intensity could be made available for therapeutic purposes. From these results he con-

cludes that ultraviolet light possesses no therapeutic value for the destruction of bacteria within the animal tissues.

HOW TO REMOVE STAINS

An article in the *Nursing Times* gives the following practical information on removing stains:

Iodin.—This can easily be removed by soaking it in cold water, then cover the stained part with a little powdered starch moistened with water. Spread the paste on the stain, leave it until dry and then wash in the usual way.

Medicine, Such as an Iron Tonic.—Pour a stream of boiling water over the stain, then with a bone spoon apply a little salts of lemon, rubbing it gently with the back of the spoon; pour on more boiling water and the iron stain will have disappeared. Dip the part of material from which the stain has been removed in a little water (about a cupful) containing half a teaspoonful of dissolved carbonate of soda. This is to neutralize the acid, thus rendering the effect of it quite harmless to the fabric. Any specially difficult stain due to very strong medicine or coloring matter, which cannot be taken out by the simple, quick means, can always be removed with permanganates of potash and well diluted sulphuric acid. To use these—put a little permanganate of potash solution in a glass and a weak solution of sulphuric acid in another one, and then place the stained article in the permanganate of potash and leave it a few minutes, and this will dissolve the stain; then remove the discoloration by putting it into the weak sulphuric acid solution, and, if necessary, repeat the process until the mark is gone.

Wine Stain.—While wet place a paste of powdered starch (starch and acid water mixed together) on it and leave for some time (an hour or two); then rub off and the mark will have nearly gone. Finish by washing and boiling, or, if preferred, use lemon juice and common salt. Moisten the stain with the juice, apply some salt and rub with a bone spoon, using more juice if necessary; then wash in the usual way. If these simple methods fail, a weak solution of chlorid of lime is always quickly successful. It can be bought in liquid form at the oil shop. Use it in the preparation of a teaspoonful to half pint of cold water. As an antidote to this strong alkali, rinse the material very thoroughly in cold water. Never use chlorid of lime for colored articles, or silk, as it turns white silk bright yellow, which discoloration can never be removed.

Wet Ink Stains.—Rub with a piece of ripe tomato and then rinse well in cold water; wash and boil; or put a little red ink on the mark and wash; the acid dissolves the iron in the ink and sets free the tannin or coloring matter, which will boil out.

Tea, Coffee or Cocoa.—Borax is best. Pour boiling water through the stain while it is wet, if possible; place some powdered borax on and pour on more water; then wash, boil and dry in the sunshine. Sunshine seldom fails in removing such stains as tea, coffee or scorch marks.

Blood Stains.—These should be soaked in salt and water for some hours; then wring out and rub in a fresh supply of salt and water. Next wash in ordinary way, with soap and warm water; boil, rinse and dry in sunshine.

THE TRUTH ABOUT MEDICINES

Since the publication of New and Nonofficial Remedies, 1914, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

TRYPSIN, FAIRCHILD.—A powder consisting of the proteolytic enzyme of the pancreas, separated to a considerable extent from the other enzymes and constituents of the gland and of a definite strength. Trypsin digests proteins and nucleoproteins in slightly alkaline media. Fairchild Bros. & Foster, New York (*Jour. A. M. A.*, March 7, 1914, p. 776).

CEROLIN.—Cerolin consists of the fats, cholesterins, lecithin and ethereal oil extracted from yeast by alcohol. Experiments have indicated that the laxative action of yeast depends on the fats and lipid constituents and that in skin affections these substances have the action of yeast itself. Hence cerolin, marketed in the form of cerolin pills, $1\frac{1}{2}$ grains, is said to be useful in furunculosis, acne and in other skin affections. It is also said to be useful in habitual constipation, leukorrhea, erosions of the vagina and cervix and in similar diseases. Merck & Co., New York City (*Jour. A. M. A.*, March 21, 1914, p. 931).

REFINED AND CONCENTRATED TETANUS ANTITOXIN, SQUIBB.—For description see New and Nonofficial Remedies, 1914. Marketed in the form of syringes containing respectively an immunizing dose and a curative dose. E. R. Squibb & Sons, New York (*Jour. A. M. A.*, March 21, 1914, p. 931).

TYPHOID VACCINE (IMMUNIZING).—For description of typhoid vaccine see N. N. R., 1914, p. 259. It is prepared according to the method of the U. S. Army Laboratory. Marketed in ampule and syringe packages each containing 500 million, 1,000 million and 1,000 million killed typhoid bacilli. H. M. Alexander & Co., Marietta, Pa. (*Jour. A. M. A.*, March 28, 1914, p. 1014).

B. B. CULTURE.—A pure culture of *Bacillus Bulgaricus* marketed in bottles containing 90 c.c. Intended for use in intestinal indigestion and for the enterocolitis of infants. B. B. Culture Laboratories, Yonkers, N.Y. (*Jour. A. M. A.*, March 28, 1914, p. 1014).

PROPAGANDA FOR REFORM

AMORPHOUS PHOSPHORUS.—Amorphous or red phosphorus is chemically most inactive and pharmacologically is generally considered without action. Now Dr. I. L. Nascher proposes amorphous phosphorus as a remedy of remarkable value for arteriosclerosis of old age—but produces no reliable evidence for his claim. Based on Nascher's assertions, Sharp & Dohme advertise Pill Phosphorus Amorphous S. and D. as a successful method of treatment for senile arteriosclerosis. The asserted actions of amorphous phosphorus are such as may be calculated to appeal to the sexual neurasthenic and the advertisements are likely to bring about an extensive use of the drug by the uncritical. The psychic elements which play so large a part with the sexual neurasthenic will bring favorable reports on the drug—at least for a while—just as at one time ordinary phosphorus had a vogue (*Jour. A. M. A.*, March 7, 1914, p. 793).

RED PHOSPHORUS.—I. L. Nascher in a letter to the *Journal* states that he has had nothing to do with the exploitation of Pill Phosphorus Amorphous S. and D. He admits that he has no experimental basis for the

use of this remedy and that his theory is simply a theory without facts to prove it (*Jour. A. M. A.*, March 28, 1914, p. 1033).

TOWNS' EPILEPSY TREATMENT.—This nostrum, formerly sold as Towns' Epilepsy Cure, is a bromid mixture that is taken indiscriminately by the public in doses that no physician would dare prescribe. The nostrum is given an editorial commendation in *The Western Christian Union* (*Jour. A. M. A.*, March 7, 1914, p. 794).

THE ABSORPTION OF IRON FROM MINERAL WATERS.—It is now generally admitted that both forms, organic and inorganic, of iron compounds can be absorbed and satisfactorily carry out the purposes for which they are ordinarily administered. Recent investigation has shown that iron salts are absorbed from natural waters (chalybeate waters) in which they occur and there is no reason for supposing that these cannot facilitate hemopoiesis and hemoglobin formation, if there is a deficiency in the iron-containing component of the blood, precisely as medicinally administered iron may. They seem to possess no advantage, however, over the latter (*Jour. A. M. A.*, March 14, 1914, p. 856).

RADIUM THERAPY.—The value of radium in the treatment of constitutional diseases has not been demonstrated. While some clinical evidence has been introduced to show a favorable effect from radial preparations, the interpretation of such evidence is always beset with difficulties; it is hard to separate the improvement which arises from psychic influence from that which rests on an objective basis (*Jour. A. M. A.*, March 21, 1914, p. 952).

CITROLAX.—Advertisements suggest that Citrolax is magnesium citrate in tablet form and superior to the regular magnesium citrate solution. Examination of Citrolax in the A. M. A. Chemical Laboratory showed that the tablets when treated with water did not give a clear solution. The watery solution was found to contain magnesium, sodium and citrate, while the insoluble portion was found to be phenolphthalein equivalent to $3\frac{1}{2}$ grains of phenolphthalein per tablet (*Jour. A. M. A.*, March 21, 1914, p. 949).

THOXOS.—Thoxos is offered to physicians by John Wyeth & Brother for the treatment of rheumatism, rheumatic arthritis, gout, etc., with the following incomplete statement of composition: "It is a palatable solution of Strontium and Lithium soluble salts, 32 grains, combined with twenty-four minims Wine of Colchicum Seed and a vegetable alterative, in each fluidounce, flavored with aromatics." From an examination in the A. M. A. Chemical Laboratory it was concluded that Thoxos contains strontium salicylate, lithium salicylate, small quantities of sodium salicylate, free salicylic acid and potassium iodid, and probably also colchicum and sarsaparilla. As strontium and lithium salicylate are generally considered to have about the same action as sodium salicylate, Thoxos may be considered as equivalent to a preparation containing in each dose of one teaspoonful 3 grains of sodium salicylate with a fractional dose of colchicum and potassium iodid (*Jour. A. M. A.*, March 21, 1914, p. 949).

THE DANGER OF CROTALIN.—A death from infection from the use of crotalin is reported by J. F. Anderson of the U. S. Public Health Service. Out of 95 ampules of crotalin solution, from four different manufacturers, 35 were found to be contaminated; further, 12 tablets were examined and all found to be contaminated. It was demonstrated that there was a variation in the activity of different lots of crude venom and also in the solutions prepared by the same or different manufacturers. The report emphasizes the dangers of the use of rattlesnake venom or crotalin for the treatment of epilepsy (*Jour. A. M. A.*, March 21, 1914, p. 934).

MERCURIC CHLORID AND THE PUBLIC.—In commenting on the use of mercuric chlorid tablets by the public and on the attempts to check this by special legislation, M. I. Wilbert points out that the exploitation of this drug under non-descriptive titles such as "antiseptic tablets" is partially responsible for their indiscriminate use. The fact that they are given a distinctive shape or color does not serve to protect the purchaser if he is uninstructed as to their contents; instead it tends to elaborate on the misuse of the tablets. Physicians are to some extent responsible for the public use of tablets of corrosive mercuric chlorid, for in the past, these tablets have been prescribed or given to patients for antiseptic purposes without sufficient precaution as to their poisonous character (*Jour. A. M. A.*, March 28, 1914, p. 1042).

RADIUM AND ETHICS.—Referring to enthusiastic statements by physicians relative to the curative value of radium emanations, the *Edinburgh Medical Journal* asks if there is much difference between the advertisements of any catch-penny patent cure-all and such announcements. It is pointed out that the public is only too ready to believe any tale as to the value of radium as a cure for gout, rheumatism and cancer and hence the medical profession should absolutely refrain from publicly encouraging such notions (*Jour. A. M. A.*, March 28, 1914, p. 1044).

BOOK REVIEWS

A REFERENCE HANDBOOK OF GYNECOLOGY FOR NURSES. By Catherine Macfarlane, M.D., Gynecologist to the Woman's Hospital of Philadelphia. Second edition, thoroughly revised. 32mo. of 156 pages, with original line drawings. Philadelphia and London. W. B. Saunders Company, 1913. Flexible leather, \$1.25, net.

The usual text-book for nurses bears out the saying that a little knowledge is a dangerous thing. It is extremely difficult to present a medical subject to individuals without general medical training in a form sufficiently clear and simple for their comprehension and at the same time thoroughly scientific. This, however, the author has succeeded in doing admirably in this book. The work gives the nurse an opportunity to familiarize herself with gynecological anatomy, physiology, hygiene and pathology, and with the commonly used positions for examination, preparations of the patients, operations, after care, and outfits needed in various procedures. The illustrations are well chosen for simplifying the more technical descriptions. The volume has the usual material advantages and attractions of the Saunders limp-leather handbooks.

MECHANICAL TREATMENT OF ABDOMINAL HERNIA. By William Burton DeGarmo, M.D. J. B. Lippincott Company, Philadelphia and London. Price, \$1.50.

This little volume covers in a very satisfactory manner a subject to which the average physician gives but little attention, and as a result is often not as well qualified to properly fit a truss as an intelligent druggist or instrument maker who has given the matter study and thought. The author gives briefly in two chapters the anatomy, symptoms and diagnosis of hernia. The mechanical treatment of inguinal, femoral, umbilical, and ventral herniae is taken up in detail. The various types of trusses are described and illustrated and the mechanical principles underlying the proper selection and fitting of a truss made clear. Worthy of special note is the chapter on the mechanical treatment of hernia in infancy and childhood.

This small book, while having been written for non-graduates in medicine will be of great assistance to any physician who is called upon to fit a truss.

ETIOLOGY, PATHOLOGY, DIAGNOSIS, PROPHYLAXIS AND TREATMENT OF MALARIA. By Graham E. Henson, M.D., Medical Reserve Corps, United States Army. With an introduction by Charles C. Bass, M.D., Professor of Experimental Medicine, Medical Department Tulane University. Twenty-seven illustrations. Cloth, 183 pages; price, \$2.50.

The brilliant sanitary achievements in the Canal Zone during the past few years have awakened a renewed interest in malaria and attempts at its eradication. The author of this book, from his wide practical experience with the disease, is eminently qualified to write authoritatively on all phases of the subject. He is particularly interested in the eradication of the disease and so lays especial stress on those chapters dealing with the diagnosis, prophylaxis and treatment. He deplores the purely clinical diagnosis of malaria as untrustworthy and "slovenly" in view of the comparative ease and accuracy with which a microscopical diagnosis can be made. He also considers the so-called therapeutic test with quinin "a most pernicious habit" since other "fevers" sometimes yield to quinin and still others are self-limited. That these criticisms are justly made is certainly borne out by the frequency with which the clinical diagnosis is made in the Middle Western states, where the disease has been largely eradicated.

The author's method of quinin administration is as follows: Five grains of the sulphate every four hours during clinical manifestations; after the subsidence of symptoms five grains three or four times daily for ten days or two weeks; and after that ten grains, in two or three doses, every alternate day for at least a month. Emphasis is laid on the fact that diagnosis and immediate institution of efficient treatment practically removes the possibility of the case becoming a "carrier" of the sexual forms of the parasite, thus removing what the author believes to be a great factor in the endemic occurrence of the disease.

In the matter of prophylaxis much attention has been paid to the extermination of the mosquito, but too little to the eradication of human gamete carriers, who are just as essential to the continuance of the disease as the anopheline mosquito. In this connection the author urges more immediate and more prolonged treatment (*not* only till clinical symptoms have subsided) and the most scrupulous care to prevent mosquitoes from reaching those suffering from the infection. Malaria is no longer a serious menace to this part of the country, thanks to drainage and irrigation made necessary by the march of civilization, but our duty becomes all the more plain since complete eradication of the disease in this latitude now lies largely with the medical profession. Our winters eradicate the infection so far as mosquitoes are concerned, and so before they are again capable of producing the infection in man it is necessary for them to feed on the blood of an infected man containing sexual forms of the parasite. Accordingly it is only necessary to cure these latent infections during the winter months, and to treat promptly and effectively all those cases that are imported or that have escaped observation. Whether he lives in a malarial region or not the practitioner will find this work both valuable and intensely interesting.





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ISSUED MONTHLY under Direction of the Council

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NUMBER 5

ORIGINAL ARTICLES

THE NEED OF A STATE DETENTION HOSPITAL FOR THE EARLY DIAG- NOSIS AND TREATMENT OF ACUTE MENTAL DISEASES *

FRED M. TERFLINGER, M.D.
LOGANSPOUT, IND.

No one familiar with present conditions will dispute the statement that Indiana provides adequately and handsomely, in its five public institutions, for its chronic insane. They are housed in substantial buildings, they sleep in clean, comfortable beds, they are served a bill of fare which will compare favorably with that of the ordinary private home, and they receive prompt and efficient medical attention for their physical ills, but for the care and treatment of the acute and sudden mental derangement we are obliged to admit that we are not properly equipped and that our methods are faulty and inadequate. The hospitals for insane, in other words, under the present system, are not meeting the requirements of certain primary and acute conditions which attend the onset of cases of insanity in every community.

This failure to reach the highest degree of efficiency cannot, however, be said to be the fault of the management of the hospitals because the conditions to which I refer arise before the cases reach the hospitals or come under the care of its staff.

In the lay mind there still exists the idea of disgrace associated with legal commitment, though fortunately under the healthful publicity

of modern insane hospital management this conception is gradually disappearing. But a family or a community on which devolves the care of one afflicted with insanity hesitates for one and another real or fancied reason to institute the legal measures necessary for admission to a public hospital.

There is no community which is immune from the occurrence of cases of insanity, the predominant features of which make immediate and imperative the demand for appropriate and intelligent care lest the patient inflict serious and mayhap fatal injury on himself or others.

When such a case arises the customary ministrations of the physician become secondary to the necessity for physical restraint, proper housing and skilled nursing. Often the physician is unfamiliar with mental diseases and is more or less helpless, the household is in commotion, no experienced attendant is available and the patient is uncontrollable, excited, boisterous, homicidal or suicidal.

Even if there be a public or private general hospital at hand no provision has been made for such cases. There are no suitable rooms or properly trained nurses, and, moreover, the patient would disturb the other inmates and the necessary restraint could not be enforced without legal sanction.

Under our present system, unless the patient's relatives are financially able to send him to a private retreat, his case is one which must conform to statutory enactments before he can be admitted to a public hospital for mental disorders, and even though the relatives and friends be brought to recognize the necessity for prompt action, there is necessarily a loss of precious time because of legal technicalities, and it not infrequently happens that the patient must suffer a period of incarceration in the city or

* Read before the Indiana State Medical Association, at West Baden, Sept. 25, 1913.

county jail as a protective measure and because there is no other place of safe keeping available. Is it not a blot on our civilization when we daily commit cases of acute mental illness to the care of the police officer or sheriff to be locked up in the city prison or county jail, there to remain for days or weeks without suitable care or treatment, and this not because of any blunder in the recognition of the malady but solely because this is the only provision the community affords for the care and safety of such cases?

About two years ago the Southeastern Hospital, at Madison, constructed at a cost of a million dollars, was opened for the reception of patients. At that time all the other hospitals of the state were badly overcrowded and the hospital districts were reconstructed with a view to filling the Southeastern and relieving the congestion in the other institutions. But now not only the new hospital is full but all the others are populated to their capacity, and if the next general assembly should make an appropriation for another institution there would be by the time of its completion a sufficient number to fill it.

If the present plan of farm colonization works out satisfactorily—and we are all sanguine of its success—and it is extended to the other state hospitals, then the chronic classes will be cared for satisfactorily for many years to come. But is it not our duty to exert every effort to prevent the accumulation of the chronic classes and the constantly increasing public burdens which they entail, and is it not reasonable to assume that this can best be done by reaching the acute cases while there is hope of recovery and giving to them the most scientific study and care of which we are capable? The writer maintains that the public hospitals for insane will not accomplish the greatest good to the greatest number until such time as the statutes are so reconstructed that it will be possible for the person who realizes, or whose friends or relatives realize, that he is threatened with a mental or nervous breakdown, to apply and be admitted to such institution for diagnosis and treatment for short periods without the formality and necessary delay accompanying legal commitment. Nor will the commonwealth be discharging its full duty until provision is made whereby the acute maniacal case can be immediately transferred to a properly equipped and scientifically conducted institution for the exclusive treatment of nervous and mental diseases without recourse to

the county jail or city prison as a method of restraint.

Overcrowding is a chronic condition in the state hospitals. Indeed, during my ten years' work in them I cannot recall a time when all the institutions were able to accept promptly all the cases committed. It follows, therefore, that wards or buildings set aside for the housing and treatment of acute cases soon become congested, from sheer necessity, with all classes of cases, and proper segregation is impossible, and segregation is the keynote to individual treatment. Dr. Herdman long ago recognized the necessities on which I have dwelt and suggested the following solution: Let there be erected in connection with each hospital for the insane a reception observation hospital, properly equipped with modern therapeutic appliances, laboratories, etc., to which patient could be admitted with no more formality than now attends the admission of patients to any charity hospital, there to remain until such time as the officers consider it wise to discharge or recommend their legal commitment. It is already the custom for hospitals for the insane to receive when possible all the cases from their districts, but only after due process of commitment and many times after it is too late to give the patient that benefit which earlier attention would have insured him.

Extend this beneficent work to the county seats or other centers of population and arrange in connection with the general hospitals a psychopathic ward, with suitable room or rooms and a trained attendant. Let these reception stations be selected and supervised by the superintendent or staff of the state hospitals. When a deranged person is placed in the observation ward notify the state hospital and have the patient immediately visited by a member of the staff who would examine and diagnose the case, outline the treatment and determine whether it is best for him to remain at this temporary retreat or be conveyed to the state hospital at once. By this arrangement the hospital staff would be brought into closer touch with the patient's surroundings. They would meet more of the family and friends, their knowledge of the patient's home conditions and influences would be more complete and the educative influence on the people themselves would be beneficial for it would teach them that insanity is a disease and is relieved and often cured by the ministrations of a physician skilled in the art of dealing with insanity in its manifold forms. Let there also be established in

connection with the Robert W. Long Hospital a psychopathic ward or building, to which patients could be admitted without legal red tape, equipped with proper laboratories for research work and affiliated with the Indiana University School of Medicine, in other words, a central state psychopathic hospital similar to the one at Ann Arbor, Mich. It would be possible for such an institution to maintain close relationship with the several state hospitals, receiving from them clinical and laboratory material and communicating the results of special investigations bearing on the correlation between structural changes in the central nervous system and clinical symptomatology.

The importance of such a central institution affiliated with the university cannot be overestimated. The last report of the medical director of the Michigan State Psychopathic Hospital reads as follows:

"The establishment of the institution in connection with the university hospitals has given opportunities until now unique in the history of medical instruction in this country. It has been possible to extend further the work of clinical instruction so that now clinics of one and a half hours' duration weekly are given fourth year students, and a section of the class receives two hours' instruction at the bedside. The abundant material of the laboratory is utilized in the conduct of a course in neuropathology given to junior students. In future years the better knowledge of mental diseases on the part of physicians will be one of the most important influences in the prevention and treatment of insanity."

The functions of such an institution might easily be made to include the sociologic and economic aspects of the problem, the collection of data regarding causation, and would no doubt in time be a potent factor in the solution of medicolegal entanglements, of which there are many.

Indiana is trailing behind her sister states in the matters referred to in this paper, and while the subject is one which interests the sociologist and the economist as well as the medical man, yet it is, after all has been said, primarily a medical problem, and measures looking to the establishment of such an institution and the modification of the laws regarding commitment should in my opinion be inaugurated by this Association.

CRIME AS AN EXPRESSION OF FEEBLE-MINDEDNESS *

DAVID C. PEYTON, M.D.

JEFFERSONVILLE, IND.

The medical profession always has been the champion of humanity. The impulses that have made for growth in all the ages have come mostly from the medical profession. That profession always has had more wisdom than it could get permission to employ; and in this very age if the world would turn over its greatest human problems to the medical guild and give that guild free rein, civilization and progress would go forward with accentuated speed.

It is a sad indictment of our boasted civilization that so many serious, preventable conditions mar our present and menace our future. One of the stern, sad problems with which we are confronted and which actually threatens our racial supremacy, is the problem of the feeble-minded. We as medical men know that mental subnormality is a thing of family transmission, that it runs in breeds, that it produces root stocks from which spring lunatics, criminals, tramps, prostitutes and all that motley group that throng our institutions and comprise what I would term, to coin a descriptive phrase, "Nature's disinherited."

Whence comes that anomalous being, the criminal, and what marred his nature, are questions which we scarcely will touch on. It appears certain, however, that he is a psychic inferior, a member of that large class of subnormals to which we have referred and which we include under the generic term, feeble-minded.

The consensus of opinion of the best thinkers of to-day would seem to warrant the conclusion that the great underlying, fundamental cause of crime is mental enfeeblement, and that the various physical anomalies and unusual mental reactions are results—frequently concurrent—and not causes, although feeble-mindedness may exist without any physical expression; both are alike expressions of the same general condition, and that underlying and basic of the general trend of physical and mental degeneracy we find anthropological inferiority. The foregoing leads me to conclude that simply the violation of law is not necessarily with criminal intent, but as

* Read before the Indiana State Medical Association, at West Baden, Sept. 25, 1913.

a rule it is to be regarded as an expression of mental enfeeblement. That which is law to-day may be repealed or declared unconstitutional to-morrow, so that the crime of to-day is not a statutory crime to-morrow. Again, many of our law violations are the result of ignorance; and it is therefore the expression of the antisocial tendencies that furnish the real evidence of mental enfeeblement with vicious predisposition.

There is no such thing as a distinct criminal type, and a careful study of anthropology does not justify the conclusion that there is. Our prison population, made up as it is of the weaklings of society—the flotsam and jetsam—who are incapable of and unable to maintain their places in the competitive struggle for existence, are not criminals in the deterministic sense, but they are necessarily of that diathesis from which we may expect, to a greater or lesser degree, anti-social attitudes.

The present-day practical application of the science of criminology is analogous to the practice of medicine in the calomel and blood-letting days. Time was when a physician was content to make the same simple diagnosis cover all of his patients, practicing for all alike the treatment of calomel and blood-letting. To-day the almost universal application of the science of criminology is founded on the false notion that every individual committed to a prison is guilty of a voluntary or wilful violation of the law and is therefore a criminal, and that all criminals are alike in that their antisocial actions are premeditated and wilful. Little consideration is given to classification of the violators, and a general system of rules arbitrarily is laid down applying to all alike. What would be the opinion of even the laity should a physician of to-day visit his several patients and, contenting himself with the simple observation that each patient was ill, prescribe the same treatment for all, ignorant of the exact nature of each case? If a better understanding were had by society of the real causes of the so-called criminal action of our prisoners, public opinion to-day would condemn the one as much as the other.

There seems also no longer any doubt that prostitution in the female, like crime in the male, is purely an expression of feeble-mindedness, and I am sure the day is not far distant when the treatment of both the prostitute and the criminal will be sterilization and segregation—permanent custodial care or control.

Aschaffenburg holds that prostitution cannot be exterminated and that attempts to do so are futile and are conducive to harm rather than good. He does, however, insist that governments should regulate the social evil and keep it under the strictest possible surveillance, and at the same time use severe repressive measures against procuration.

It is admitted by all students of criminology that the criminal is mentally and morally defective, but is he physically defective also? A careful analysis of the hospital records of the more than 5,000 inmates that have passed through the Indiana Reformatory would tend to support the contention that there is a parallelism of defect, both mental and physical. The findings of examinations made by Dr. Sleyster, at the Wisconsin State Prison, are also indicative of a physical inferiority. Recognizing the truth of the foregoing, are we not justified in the conclusion that the theory of Dr. Marro, that the whole condition is due to a form of malnutrition of the central nervous system, influencing both mental and physical development, is in reality true? If it is true that there really exists both a mental and physical subnormality I know of no more satisfactory etiology than that enunciated by Dr. Marro. I would not have it understood from this that I believe there is any definite physical expression of a definite mental enfeeblement with criminal tendencies.

The following physical statistics of the medical department of the Indiana Reformatory are both interesting and suggestive.

MURDER AND MANSLAUGHTER

| | |
|-------------------------------|------------------|
| Average age | 29 years |
| Average weight | 141 pounds |
| Average reach | 76 inches |
| Average chest expansion | 2 15/16 inches |
| Average height | 5 feet 7½ inches |

There are 177 men in this class.

BURGLARY, ENTERING A HOUSE TO COMMIT A FELONY AND ROBBERY

| | |
|----------------------|------------------|
| Average age | 22 years |
| Average weight | 152 pounds |
| Average reach | 76 inches |
| Average height | 5 feet 7¾ inches |

There are 2,665 men in this class.

GRAND AND PETIT LARCENY

| | |
|----------------------|------------------|
| Average age | 21 years |
| Average weight | 140 pounds |
| Average reach | 71 inches |
| Average height | 5 feet 4½ inches |

There are 2,583 men in this class.

SEXUAL CRIMES

| | |
|-------------------------------|------------------|
| Average age | 23 years |
| Average weight | 142 pounds |
| Average reach | 74 inches |
| Average chest expansion | 3¼ inches |
| Average height | 5 feet 6¼ inches |

There are 255 men in this class.

RECIDIVISTS

| | |
|-------------------------------|------------------|
| Average age | 27 years |
| Average weight | 159 pounds |
| Average reach | 76 inches |
| Average chest expansion | 2 9/16 inches |
| Average height | 5 feet 8¼ inches |

These averages are based on 327 men.

AVERAGES OF ALL THE MEN WHO HAVE BEEN IN THE INSTITUTION

| | |
|-------------------------------|------------------|
| Average age | 23 years |
| Average weight | 143 pounds |
| Average reach | 74 inches |
| Average chest expansion | 3 6/16 inches |
| Average height | 5 feet 6¾ inches |

There are 5,680 men in this class.

Compared with college and university classes the above statistics are distinctly suggestive of physical inferiority, but when compared with statistics of general life insurance they are less indicative.

In this connection I recall to your mind that just a year ago this society was advised of the fact that but recently there had been established at the Indiana Reformatory a department of research which would begin its investigation in the field of criminology by the immediate establishment of a psychological laboratory. At that time your council was pleased to take such action as to give this institution the encouragement of your interest and approbation. The résumé then of the work of the year, which seems to give further evidence of the intimate association of feeble-mindedness and antisocial tendencies, will be not only of your desire but also of your expectancy. Two extreme views of the field of crime at once confronted the laboratory psychologist. The one, that all persons at some time or other during their lives had been guilty of more or less serious violations of the law, and had society been anxious to detect and try all cases of law violation with equal zest, conviction and imprisonment must have gone on logically to such an extent that at last there would have been none left to turn the keys. The other extreme, that all convicted and sentenced for crime are defective, and as such hardly could be held accountable for the antisocial attitude which caused their imprisonment. In the light of the first extreme the cause might be sought in either the waywardness of life, or in influences of an unfortunate social environment. The lat-

ter extreme view embodies its own cause, and would argue further search unnecessary. The first extreme, moreover, held that practically only such members of society as wilfully and perhaps maliciously continued to disregard the dictates of society as expressed in law were finally brought to justice, and consequently to make up the population of our various penal institutions, while the latter extreme went so far as to declare that because of their irresponsibility, the inmates of our prisons and reformatories might just as well have been sent to institutions for the feeble-minded or hospitals for the insane.

Needless to say that the investigator, except for an occasional hypothesis on which to base his work, was obliged to ignore entirely any and all preconceived notions and in the light of the most intelligent procedure that it was possible for him to methodize, to work over the field with a mind frankly open to the reception of truth from whatever quarter it might come, without any reference whatsoever to existing theories. In the absence of any standardized tests hitherto employed in this particular field, the more or less generally accepted psychological tests, operative in other fields, were brought into requisition, it being understood that the tests themselves were on trial, to be discarded at any time that they proved inadequate or inapplicable under the prevailing conditions. According to the plan in practice during the present year, all new men at the institution were tested immediately after arrival. Three hundred and sixty-five of these passed through the laboratory in the last eleven months. In spite of the fact that due allowance was made for the disastrous effect on mind and body of long imprisonment in insanitary jails, for the strangeness and consequent depression of the environment, and for the unwillingness of the patient to express himself frankly and honestly while undergoing the tests, a surprisingly large percentage of the three hundred and sixty-five tested subnormal to a more or less marked degree. In many cases the defect revealed was in the field of general intelligence, while in many more the deficiency was discovered to be in one or more fields of specific function, so large a number belonging to this latter class as to raise the question in the mind of the observer, Are not practically all of our inmates seriously defective? A splendid example of this latter class is to be found in a young fellow whose general intelligence measures up quite to that of the normal boy of his age and of the same opportunities and advantages, but whose sense

of moral relationship was so completely lacking as to render him incapable of appreciating any wrong done in the cold-blooded murder of a fellow inmate who had never given him any cause for dislike, and whose general behavior was such as to make friends for him rather than enemies; the murder having been committed for no other reason than the hope that the murderer would be considered a sufficiently bad man to be transferred and allowed to indulge his appetite for tobacco.

The application of the Binet-Simon tests in this laboratory has revealed a startling percentage of men whose mental age would average between 10 and 11, while the physical age would average between 21 and 22. For many reasons, which soon become apparent to the psychologist, the absolute reliability of the Binet-Simon tests for this class of men is to be questioned. However, as a revelation of conditions which actually exist, and as a basis on which to operate a series of corrective tests, their value must be acknowledged.

An experiment in the field of the educative process was made during the year with a class of twenty-five men for the purpose of discovering as nearly as possible by intimate acquaintance and classroom tests the actual mental capacities of the subjects. After three months of such work in the school of letters, a series of psychological tests was given to each member of the class with a sufficient deviation in results as compared with the results of the tests given on entrance as to determine us in the postponement of the psychological tests in the future until the inmate shall have been in the institution a sufficient length of time to enable him to feel more or less at home in the new environment, and to have benefited both physically and mentally from the regularity of institution life. The work with this experimental class revealed, too, an appreciable percentage of inmates who could profit little or not at all by the educative process in our school of letters. There remains for these men little more than training in comparatively simple reaction in the trades schools of our institution.

The presumption that many of our inmates became antisocial in their former environments because of their inability to make an honest living in the various trades open to them led during the past year to an investigation along the lines of industrial adaptability. There is little question that a considerable percentage of our inmates might be trained to a certain degree

of industrial efficiency if that particular line of work could be discovered which would not only claim their interest but yield results to their more or less limited capabilities. While here, too, no accurate schedule of reaction requirements has ever been computed for the various trades taught in industrial schools, a more or less careful analysis of what is required for success in particular trades has suggested a type of reaction necessary to any sustained progress. Such tests then, applied to our men, have brought such results as have warranted us in trying out in the various trades schools the subjects who come to our attention. While it is impossible at the present time to make any statistical report, we are warranted in saying that in spite of the defective intelligence in many cases, and serious limitations in many more, a goodly number of the inmates of our reformatory institutions can be so taught as to become self-supporting artisans at least.

It will be absolutely necessary in order that the department of research may do the work reasonably expected of it, that it shall enter not only the field of psychological investigation, but the fields of eugenics and sociology as well. We already have the indispensable support and assistance of a most strongly equipped medical department and it remains for us to open up the field work in connection with our inmates as to enable us to become advised of both the characters inherited by them from their ancestry and the characteristics acquired in their environment. The coming year will add to our force a sociologist, who, working in connection with our field agents, will be able, we hope, to gather such information as will furnish us with an insight both into the nature of our inmates and the influences brought to bear on them in the past, enabling us to give not only a reasonably correct diagnosis of the case, but in the presence of multiplied cases, a comparatively sure prognosis—to dictate the correct treatment and to recommend a logical and final disposition.

Thus far the work of the psychological department has operated largely to survey the field, to try out methods and to secure the necessary closer acquaintance with subjects—in so short a time it would be both misleading and foolhardy to attempt to enunciate principles or to draw final conclusions. It is worth while, however, we believe, to present these tentative findings, which are really in the nature of a suspected symptomatology which serve to suggest our lines of procedure.

DISCUSSION ON PAPERS BY DRS. TERFLINGER
AND PEYTON

DR. A. E. STERNE, Indianapolis: I endorse the attitude that Dr. Terflinger has taken, and presented to you, but I would go one step further and say that no individual should be committed and that we have no right to commit any individual as insane to a state institution until we know positively that that individual is insane and not suffering from some acute physical condition which has destroyed his mental balance for the time being. We must consider these acutely mentally disturbed individuals as sick folk. They are just as sick as if they had typhoid or pneumonia, and very frequently they have typhoid fever and we fail to recognize the condition because it arises in this way. These individuals must be treated as sick folk. They cannot be treated as sick folk in jails or in county houses or hospitals for the insane, and they cannot be adequately treated as sick folk in our present state institutions with the equipment which they possess. We must have a detention hospital where we can observe and treat and properly classify these individuals, sending them into the state institutions if necessary, and when not necessary they will not have hanging over their heads the opprobrium which the laity, at least, and a great many of the medical profession, allow to rest on them, from the fact of their having been committed to insane institutions.

Concerning Dr. Peyton's paper, I want to make one fundamental observation which I have not heard locally expressed and which in science might be considered substantial. We may preen ourselves, no matter how much, on our superiority in the treatment of children. From homosexual by development we become heterosexual. We don't instinctively, any of us, or few of us, come out of the homosexual period. We are trained out of it by education or by environment. I admit, of course, that there are certain exceptions, but the exceptions are so few and far between that we regard them as very rare. The persistence of homosexual impulses, as we develop, brings us into conflict with the statutes and are the fundamental stones on which the criminal classes are built up, in one or another direction. These homosexual impulses are not altogether merely in the sense of sexual impulses, but they must also be made to include the other fundamental principle of the human race underlying the attempt to maintain existence. The basic principle is exactly the same. The child does not know mind from matter; he must be taught mind from matter, and so it is in the earlier years that these individuals need teaching. They pass out of the control, unfortunately, of those who should control them, and

this during the time when they are subject to backsliding influences. That is also true of those who are committed to institutions for the feeble-minded. They are kept in these institutions up to a certain time, and just at the time when they are getting to their natural development, to become heterosexual, return to the homosexual type. They are then turned out on the community at large, incapable through their own training, physically and mentally, to maintain themselves properly in the community after their release.

My position would be that once an individual is made a ward of the state, he or she should remain the ward of the state throughout life, and it should remain entirely for the board of control to say what degrees of liberty shall be granted. I believe it is utterly useless and a throwing away of money and waste of valuable time to try to teach this class of defectives. They are defective not so much of themselves, but because of that which has been handed to them, and because of surroundings which do not permit of the development of that small endowment possessed in the first place. We should keep control of these individuals. We should not allow them to go uncontrolled.

As Dr. Peyton has pointed out, we ought to measure the degree of adaptability which these individuals show. We are constantly putting the cart before the horse. We want results now. I am not content to wait to get results in a generation or two. While I am ordinarily optimistic regarding social conditions I become pessimistic when I find that whatever we try to do as a profession we immediately become hampered through the attitude of the public, which seems to feel that whenever the medical profession wants to do something for the good of humanity it is directly or indirectly trying to do something good for the medical profession.

DR. J. N. HURTY, Indianapolis: It seems to me that the idea of not permitting the inmates of the institutions for feeble-minded to again appear in society is practically law now, in the state of Indiana at least. At one time it was the law that the trustees of the institution for the feeble-minded should discharge inmates when such inmates came to a point where they were self-supporting. The fact is that persons who have ever been committed under the ordinary process to an institution for the feeble-minded never will be able to be self-supporting under their own direction. Their weak minds will not permit them to be so. Therefore, those feeble-minded girls there who can be taught lacemaking, who can be taught to sew and sew splendidly, to cut and trim garments, to cook and to wait on the table, cannot be trusted out in the world; they have not that mental force, that force of character which will enable them to

protect themselves. They will return in a very short time—almost invariably they will return—pregnant, and then we have two where we had but one before. Now the trustees of the feeble-minded institution are empowered to retain indefinitely such of those inmates whom they believe could never be self-supporting under their own direction.

Dr. Peyton said that if a great many of the affairs of society were turned over to medical science—we will not say to physicians or to doctors, but to medical science—that a better state of affairs would appear. It was medical science that pointed out that insanity is a physical ill. It was not the business man; it was not the lawyer; it was not the preacher. Theology never discovered it. Naturally, it was discovered by medical science. The early treatment of the insane was something horrible and abominable beyond description. But when medical science came on top and showed that insanity was a physical ill, then that charity, that kindness, that goodness that we had all been looking for and preaching about was exercised. All we needed was knowledge and understanding, and medical science gave that knowledge and understanding. Charles Eliot, the great educator, says that Descartes had the most original mind of his age. He says that Descartes more than any other thinker put forth the idea that if the human race were raised to its highest possible level intellectually, morally and physically, the science of medicine would perform this service. Descartes was not a doctor, but you see that he is right in conformity with what Dr. Peyton has said, only it was said two hundred and fifty years ago.

DR. A. W. BRAYTON, Indianapolis: I would like to hear from the Chairman of this Section, who has had much experience in institutions such as have been described this afternoon. I will close by calling your attention to a very prominent case now before us, in which the principle of whether a person ought to remain under the care of the state, or, because of his great wealth and family connections should be turned loose to throw bottles at our heads and fire pistols at us. A year ago Austin Flint, who always writes in the *New York Medical Record*, gave a full account of the Thaw case, coming to the conclusion, as Dr. Sterne has emphasized, that Thaw should be under the care of the state. Anticipating that it might be of special value at some time in research work, he proved out his theory in eleven columns in the *Journal*. I will take the liberty of reading the last paragraph which Dr. Flint wrote in his article in regard to this famous case: "Not the least interesting feature in the case, from a scientific point of view, is the picture of a paranoiae, pos-

sessed of the delusion that he had a sacred mission to protect and rescue young girls from a band of powerful and wealthy debauchees, and that, in committing the murder, he was an instrument of Providence, in the person of a sadist, who lured innocent young girls to him by advertisements, in order to obtain sexual gratification by flagellation and at the cost of their degradation. As such, this case, in its completeness stands alone in the annals of psychiatry. One must, however, feel regret that the misguided efforts of relatives, aided by the best available legal ability and by expert testimony that many think open to unfavorable criticism, to set loose a highly dangerous lunatic, have brought to light the shocking details of this notorious case, however great their scientific value. It is with such a feeling that the last part of this article has been written; and as a matter of charity, much has been left unsaid."—Austin Flint, in the *New York Medical Journal*, Aug. 3, 1912.

DR. JANE KETCHAM, Indianapolis: I wish to add a slight word of testimony for Dr. Peyton's paper. I have been an examining physician for one of the state institutions for the last seven years, and in that time, according to our statistics, at least four-fifths of the girls who have been examined, instead of measuring up to the standard of girls of 14 and 15 years of age, have measured up to the standard of a child of 5 or 6 years of age. Many of these girls who are wards of the state of Indiana, on reaching maturity, 18 years, are turned away from the school under what is known as the probation system. They are not mature girls at all, although 18 years of age. At their maturity they are not over 10 in their mentality. I suppose I have examined one hundred of them in the last seven or eight years, and they simply offer themselves a ready prey to the unscrupulous.

DR. MILTON BOARD, Louisville, Ky.: It has been my privilege to spend the last ten years of my life in institutional work, serving in the various Kentucky state hospitals, and on the State Board of Health. I am more recently in a private institution of my own. This brings me to a position where I may look at the matter from three different points of view. It has impressed me with most force during my entire institutional life, especially in view of the fact that I spent the first ten years of my professional life as a country doctor, that there has been a lack of the teaching of psychology in the medical colleges. Hence, the general practitioner goes forth, as we all do, without even an elementary knowledge of psychology, without ability to recognize mental diseases at the time when it is

so important that they be recognized. We all know that if we are to cure any acute disease, and insanity differs from anything else of an acute nature, it is highly important that we recognize it in time to apply the proper treatment, if we may cure the disease. Hence, it is highly important that the medical profession insist on the careful scientific teaching of psychology in our schools. I regret to say—although it is not in the nature of criticism, although we have been educated up to it—that the University of Louisville has not done its full duty in that direction. I am not familiar with your Indiana institutions. I don't know what the case is here with reference to the early recognition and the early treatment of these maladies. What is the actual result? What is the tangible result? If we had established in Indiana or Kentucky a psychopathic hospital in connection with our state asylums, what ought we to expect? What would be the practical result of such an institution in such a hospital? We have evolved in the last one hundred years insofar as the management of the insane is concerned. We have evolved from the old chain and staple institution, where they took the patients down to the basement. The one at Lexington, Kentucky, which is the second oldest asylum in this country, I believe—it was my privilege for three years to serve on the State Board of Health, which has charge of these eleemosynary institutions—still has the remains of the chains and staples in the basement, monuments of the care of madmen of other days. We have evolved from that time to the hospital care of the present day, where insane people of all classes sleep in rooms without the doors being locked. In some hospitals, indeed, they are without any doors at all. However, insofar as the treatment of the patients is concerned, we have not kept pace, society has not kept pace, so far as the state hospitals are concerned, with their improved facilities for their custodial care. Now, with proper treatment and simple, rational measures, and because they are administered in the proper place, we cure 75 to 80 per cent. of the acute insane patients. I believe Dr. Sterne and these other gentlemen will bear me out in this. We would cure all except a few that would probably die from exhaustion. I think there would not be a very great many of these, because the tendency of acute mental disease is to get well, just the same as the tendency of any other disease is to get well. They would respond to treatment in a few weeks, or a month or two, at the most. The so-called melancholias would respond in a month to six months, and we would have a nice recovery. Our drug insanities and the majority of our syphilitic cases would very

quickly and rapidly respond. The alcoholic insanities and drug insanities would all respond very nicely. Right here I want to say a word on the early recognition by the family physician of these conditions. The physician who early recognizes them will not give the patient morphin or any other preparation or drug, and further run the risk of making a chronic morphinist or adding fuel to the flame, adding to the toxemia of that individual, and bringing about a pathologic condition from which there is no recovery. We would cure all these people and they would escape the stigma of having been committed to such an institution. All these things can naturally be done, so far as education is concerned.

Now, I want to take issue with Dr. Terflinger, to a degree, with reference to the lack of legal commitment. The one great advantage of a state institution over a private institution, such as Dr. Sterne and I conduct, is—well, there are two advantages. The first is the discipline of the state institution. It can be made very much superior because we can have absolute control of the patient who is committed to that institution. That is, you can have, if he is committed there by law. You cannot if he is not committed there by law. While there are some small advantages, perhaps, in the essayist's suggestion of having them received without commitment, there are a great many advantages in having them received by commitment, particularly when you come to contention with the patient's family in having them committed there by law, so that they have to remain so long as the medical officials of that institution say. We men who are engaged in this work know full well that time and again we have a patient on the high road to recovery when some members of the family come and listen to the importunities of the patient, who is nearly always dissatisfied, and after listening become convinced that the patient is cured, taking them away just at the time when the chance for recovery is best.

Another thing about the private institution is that so many of our people have not the means to avail themselves of such an institution for treatment, hence the absolute necessity of the establishment of a state psychopathic hospital, by which the mental delinquents can be restored.

Finally, our greatest duty to society is the conservation of man. Last week we had a state fair down at Louisville. There the governors of Kentucky and Indiana met on what we call Governor's Day. They joined hands and walked around looking at the horse show and the thoroughbred stock. I saw the beautiful foal of a beautiful Kentucky thoroughbred mare. That brought to mind a thing which has always been

a mystery to me. Supposing this thoroughbred mare were in a pasture at night and into this pasture came a jack or some scrub stallion, with the inevitable result. What would the horsemen of Indiana and Kentucky do? Why, they would run up to the legislative hall, where they would have a law passed to prevent the recurrence of such a thing. Why do we stand by and see humanity suffering from the same cause? We ought to make a great improvement along the line of eugenics. We are doing less than enough, as the medical profession will admit.

DR. A. T. McCORMACK, Bowling Green, Ky.: After hearing geniuses in medicine from Indiana, the distinguished persons who would add luster to a gathering of medical men anywhere, I feel somewhat out of place for myself, a country doctor, to get up and make a speech.

In listening to Dr. Peyton's paper, I could not help but feel to a degree, and to a degree only, that in Kentucky now, we would take issue with certain of his statements, with certain of those tentative advances that he is making in scientific criminology, in that we have developed a large class of individuals suffering from distinct lines of infection. Of these mental, moral and physical degenerates, to a very marked degree, the inmates of our institutions are entirely relievable, provided that relief is offered them in the early stages of their infection; that is, in the earlier attacks of such infection. For example, take the hookworm disease, a distinct and definite disease, presenting definite symptoms. If the infection is gotten in early childhood, you see the anemia or edema, the results of the poisoning; in other words, the subsequent deterioration is mental and moral as well as physical. You see those cases advance to the age of 25 and 29 years. Given a dose or several doses of thymol, whatever may be necessary, will rid them of the intestinal parasite, which is the cause of the disease. It does my heart good to see the many cases of miraculous response which these people give in their minds and morals.

Now, the concrete example, Mr. Chairman, if you will permit me to call your attention to one of the sections of Kentucky which I have in mind. In the region of the Mammoth Cave, where some two thousand people have been living, we found 96 per cent. of them afflicted with the hookworm disease. This was after an actual examination. The treatment which we have given them and the publication of simple preventive measures, all these things have worked wonders. These people for several generations have been infected with the hookworm disease, and I am confident that one-third of them so afflicted are not able to earn the necessities of life, let alone any of the luxuries. One-third of that population are barely able to earn the necessities, while another third are not much better off.

There is very little crime there. Their magistrate tries very few cases. They have not the ambition to commit crime. Of course, there are things going on there which would not be countenanced in a Christianized community. A man lived with a woman for a short time, and for no particular reason he would go over into another neighborhood and take up with another woman, and another man would take up with the first woman. It was not a crime to do that. The moral status of that community did not deem it a crime. It was a kind of moral deformity. Two years ago these conditions prevailed there.

During the last two years these people have been treated for this condition and said treatment has reversed the matter entirely. Churches have been built, the courts are open for the redress of crime, and things are moving along in a way more resembling a Christianized community than one of prehistoric times. These people, after having been treated for a physical ailment, have been restored to a moral condition that their fathers had no conception of. We have been led to believe, Mr. Chairman and gentlemen, in the state of Kentucky—and this will apply in Indiana or any other state—that in a school building where the teacher finds a crowd of children who are unable to keep up with their studies and who are degenerates, morally and physically, there is a physical basis for that degeneracy. In a very large percentage of the cases, if the adenoids are removed, and where intestinal parasites are found that they also are removed, we are convinced that these children, owing to the fact that they are in the formative stage, may be restored as useful members of society. Where the men and women now belong to that class which are termed "poor white thrash," they may be made into self-respecting and self-supporting citizens of this country. Now, in our State School of Reformation at Lexington we have been watching very carefully groups of these children. We have selected thirty-six children infected with the hookworm disease. All but eleven of these have been discharged as cured. These were taken from the incorrigible classes at Lexington. Without the cure it had been the custom to keep them there until they were 21 years of age. There are numerous groups like that that had been restored to a normal condition by treatment for a purely physical ailment, just as Dr. Sterne and Dr. Board have suggested. I am confident that this condition of affairs exists to a far greater degree than any of us have yet conceived.

It has really been a valuable thing to us that we have found the hookworm infection in Kentucky. Our people have been roused to the idea of the prevention of this disease. This could not have been done in any other way except through the cure above referred to. The discovery of

this cure should benefit a large percentage of Southern Indiana, and the use of the same will rouse your people in the same way as ours have been to a definite consideration of preventive medicine, and to a more careful consideration of the fact that a physical ailment may be the primary cause for moral degeneracy. Dr. Hurty has been one of the most distinguished teachers of this doctrine. I know you will admit that you have large sections of your population infected with these parasites. After the cure comes the prevention of a recurrence of the disease. It is in the prevention that our great vocation lies. All this can be prevented by simple remedies, simple cleanliness in our homes and school-houses. By pursuing these methods you can liberate your state from these parasites, as we have and are doing now in Kentucky. As long as we have the insanitary conditions common to this class of people, in their homes and school-houses, just so long will we be troubled with these parasites. It is unnecessary to call your attention to the fact that these conditions should be terminated.

I am glad to have been here at this time, and have listened with great interest to the papers of Drs. Terflinger and Peyton, and the splendid discussions following. I thank you.

DR. F. B. WYNN, Indianapolis: I certainly appreciate your asking me to say a few words on these most absorbing topics presented here to-day. They are important and interesting beyond description. It seems to me that there is a wonderful field for us yet untouched in modern educational development. The whole world is very prone to strike at the factors relating to disease degeneracy. There has been great progress made along these lines of educational development, and the more I think of these problems, the more I feel that we should get at these things earlier in life. As some of you have said to-day, the early period of life, early childhood, should be exceedingly well taken care of, because that brings us to the root of our public school system. To make our public school system what it should be, and to derive the benefits from it which are there, our children must be healthy, and when they are healthy their morals will almost take care of themselves. We hear in these days a great deal of talk in Indiana, and I dare say in Kentucky and elsewhere, about vocational education. It is a fine thing. We ought to do, as suggested in Dr. Peyton's paper, and as remarked by Dr. Hurty, we ought to get down to the early period of life, not so much in vocational education, as I see it, but in throwing our education more and more to the proper molding of the growing child. The medical profession is equipped to take hold of that question, and it ought to do it through our public school system. I can conceive how a man, trained in the psychological study of the child, trained in

an understanding of the physical defects and capable of making a complete physical examination of the child, can do wonders toward the up-building of the race physically and educationally. Now, such a medical man, trained as we are trained along these lines, might go into a school building or into a group of school buildings in our county seats and cities and devote his whole life to the question of studying the children who are entering these schools, studying their psychological and physical conditions with a view of ascertaining the things which tend to a deterioration, and evolving plans whereby this can be reversed, and the capabilities of these children developed. What a great deal we could do toward properly treating these children who are sure, unless so treated, to grow into defectives, or who will be burdens on society.

Now, I really believe that we are going to come to that sort of thing, and it is not many years in the future. I would not be surprised if, in twenty-five years, there would be men trained for that very purpose, for making these careful psychological, physical and moral studies of children as they enter the schools and during their school lives.

In Indianapolis we have one schoolroom turned over to defective children. There is a woman in charge of that room who has been particularly schooled in taking care of such children. She studies each individual case. According to the nature and ability and inclination of the child, she puts one to making one thing and one to making another, until she can succeed in interesting it or them in some definite line of work. By studying these cases in this distinctive way she is able to lead them along in such a way that very bad children will become in a short while good children, and be a delight to their home and the community. That is the work this woman is doing with these children, who were formerly supposed to be incorrigible.

I believe, gentlemen, if this question of criminology could be taken up at the beginning instead of our taking the matured product, beginning down with the schoolchildren, that a great many of these degenerates could be made useful members of society.

Now, let me speak a word or two on the subject of the work by Dr. McCormack and Dr. South. Many of us attended the A. M. A. recently and certainly did enjoy, as well as having our eyes opened, the demonstration by Drs. McCormack and South. It certainly was an eye-opener regarding the wide prevalence of the hookworm disease in Kentucky. It was a revelation to us. Everybody threw up his hands and said, "If they have that thing in that sort of shape down in Kentucky, we must have it in Indiana." They told us that we had it in Indiana. They said they had cases come to them

from Indiana. After our experience at the A. M. A. we certainly are interested in the demonstration brought here by these two learned doctors. It is a great privilege and a great pleasure to have been here. There should not a single one of you go away from this meeting without being impressed with the exhibit they have shown you. The hookworm disease exists to a greater extent than we have any idea of. The trouble is that there are other diseases seemingly like this which have prevented us from recognizing this as we should. We will know more about it in fifteen or twenty years. Let us make a prediction at this moment. In a few years we will be diagnosing pellagra—all about us. I also want to say to Dr. Terflinger that he should look carefully at his patients in the institution when he returns. I should not wonder that he would find some cases there, if he only searches carefully.

DR. TERFLINGER (closing the discussion on his part): I have only a word, in conclusion, which I want to emphasize. That is what Dr. Sterne said in connection with committing people to institutions for the insane. I want to emphasize the fact that we ought not commit people to an institution for the insane without first having convinced ourselves of their insanity. I advocate their being held in abeyance until such time as we know they are insane. I know from various sources that we have received patients suffering with typhoid fever and with a temperature of 102, where they have been carted 100 miles to get them to an institution. If there were observation hospitals in connection with each general hospital all over the country, such a condition of affairs would not obtain.

I think this association should take some definite action looking to the recommendation for changes in the statute which would correct these ills.

DR. PEXTON (closing the discussion): What could be more natural than that I should come to my coworkers in the medical profession and bring to them some of the many problems I am confronted with every day in my work at the Indiana Reformatory? It seems to me that the problem or problems is or are purely of an educational character. Whatever good we are to do or accomplish must be along scientific educational lines. I feel sure that you agree in the statement that it is a matter of education that must not only be begun, but continued on through generation after generation.

When I observe and realize the conditions, mentally and physically, of the young men—many of them my friends—committed from the good families of Indiana to the Reformatory under my charge, I cannot help but wonder what is the final outlook. When we realize the rapid increase of the dependent population, not only

in this state but in all other states, and when we know how little work is actually being done to prevent this rapid accumulation, and when we see, from time to time, the institutions being crowded, new institutions built and rapidly filled up with this character of a population, people who must of necessity be dependent, we cannot help but wonder what finally is the outcome. Are we going to realize finally that prevention is the best thing we can do, and are we going to take the necessary steps looking toward that prevention, as well as the humane care of this dependent population?

Gentlemen, there are so many angles and so many confusing features to this question that I hesitate to go into them any further because I know that by so doing I must, of necessity, overstep the bounds of time.

You have been very kind in your discussion. You have manifested an interest that is indeed encouraging. I come to you this afternoon and I say to you, my friends, that the questions which we are endeavoring to solve in the institutions of the state of Indiana shall have the very best intellect that we possess. It is the duty of the medical profession, the great medical profession, to lend its best endeavors along this line of work.

EXTERNAL BONE PLATING

PRELIMINARY REPORT

H. R. ALLEN, M. D.

Professor of Orthopedic Surgery, Indiana University
School of Medicine

INDIANAPOLIS

The title "External Bone Plating" indicates exactly what it implies. Instead of leaving a metallic plate permanently screwed to one hard layer of bone I recommend an external plate poured and cast over the heads of nails whose shafts penetrate two hard layers of bone. This external cast is melted or the shafts of the nails cut as soon as bone union is established. The nails are withdrawn as easily and as painlessly as removing sutures after an external wound heals. This last statement is not to be regarded as an exaggeration, nor are you to believe that during treatment the patients complain of pain due in any sense to the projecting nails. Furthermore, I desire to say that after several years' experience with projecting wires and nails I have thus far had not a single case of infection. It must be remembered that glass and metal drains are superior to other materials, and drainage from the source, or through and through drainage is the best type known to modern surgery.

Fortunately this method of treating fractures presents both metal and through and through drainage. While I may be in error I am frequently impressed with the thought that projecting wires or nails act as lightning rods against infection rather than as predisposing factors.

In removing or casting the external plate there is little danger of burning the patient since the metal I use is a low melting alloy. I usually melt it in warm water. Water boils at 212° but the alloy melts at about 160° . Of course you can run the temperature up several hundred degrees by melting directly over a flame, but if

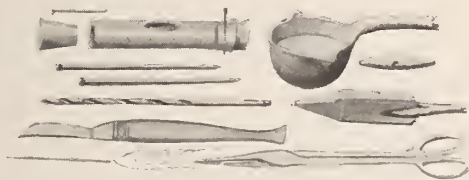


Fig. 1.—One glance at the necessary tools suggests a hardware store rather than a surgical instrument shop. In fact, a hardware store is the proper place to buy nails, drills, lades, soldering irons, etc. It is not necessary to keep in private stock a great variety of sizes, shapes and kinds of bone plates, special screws, and very cumbersome large tools that are supposed to accompany other methods of bone plating. A piece of rubber tube will bend around into almost any desired shape, and when filled with metal makes a very strong external plate that is the correct shape for each case in question.

you melt it in hot water you need have no fear of ever getting the temperature above 212° . I have frequently made casts of the palm of my hand by pouring the metal directly into the palm and then instantly cooling it with cold water. I have also used it as an intradental splint for fracture of the jaw. You build a retaining dam above the internal and external gum margin high enough to let the metal flow over the teeth. The metal takes a firm grip upon the teeth and will hold the jaw exactly as you hold it (set or not set correctly). It is removed by the application of any warm piece of metal.

The alloy I use is composed of a combination of metals that take a hard tough temper if cooled suddenly, and becomes more or less brittle if cooled slowly. This is advantageous. It is not necessary to use the alloy I use. You can work with any low melting material, organic or inorganic, or with plaster of Paris, if you think it is a good enough material. After rather wide experience I prefer an alloy that melts at about 160° Fahrenheit and tempers tough if suddenly chilled.

You can pour each cast in rubber tubes, or in troughs or forms of any material or of any shape or construction, or you can use rods already cast and tempered and then secure them

to the nail heads or knobs cast on the heads by using a warm soldering iron or other convenient tool. The external plate may be cast with right and left turnbuckles for adjustment, or with any conceivable terminals or interspaced devices. Gauze should always be placed between the open wound and the field for casting the external plate.

Concerning the nails or pins or wires I recommend long, thin, small headed wire nails or brads and drills that make neat fitting holes. The nails should pass through two layers of hard bone because this provides much more strength than can be secured by 5 or 10 times as many screws that merely have $1/16$ to $3/16$ of an inch bearing in hard bone, while the greater proportion of the screw length is left projecting into soft bone marrow or cancellous tissue. When the screw holes become too large for the screws they may slip out, but when the nail holes become too large for the nails they cannot fail to act because they reach through two hard layers of bone. The nails, unlike the screws, should never be parallel. Both the surgeon and the carpenter know that to toenail a studding securely to place, the nails must all be staggered and none of them parallel. The same good, common sense applies to bones.

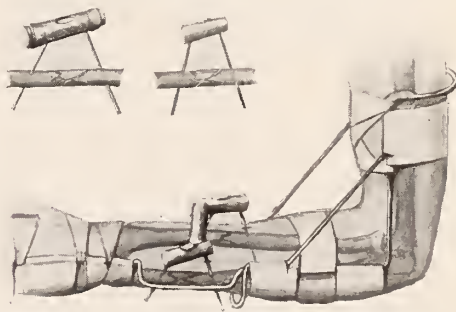


Fig. 2.—Fractures of both radius and ulna in their lower half call for four nails. Usually I use two unparallel nails for each fracture. Correct first the radial fracture—then the ulnar—then cast a separating lug or solder a plate between the two and you have all the stability necessary. The broken ends of the radius cannot rotate if transfixed by a nail. The fragments cannot separate nor over-ride nor assume angularity; nor can the radius and ulna be drawn together when the third lug or separating plate is secured between the other two plates. The separating lug is not necessary, but it guarantees so much additional strength in fixation and it can be cast or soldered into place so easily that it is strongly recommended. Note the strength and simplicity of the wire and adhesive plaster splint. All parts are open for inspection and manual contact. Wet surgical dressings can easily be applied and removed.

Concerning the kind and shape of bone pins or nails, you may use what you like. The nails, we may call them, may be made of any good strong metal or may be plated with nickel or silver or other metal. They may have round or polyhedral sides, with smooth or uneven shafts,

with or without projections or bends. The ends may be alike or unlike,—a head at one end and a point at the other, or terminating in bends or knobs, or eye-holes, or notches, or have castings upon their end or ends. The field is open. Usage will decide the appropriate type.

An open incision is made for observing the fractured zone. Holes are drilled and nails put through the holes about one inch or more from the fracture zone. The bones are set accurately by hand under direct vision and digital contact; while accurately set, the cast is made. You let go of the bones and if your work is properly done the bones remain in accurate position as if by magic. This kind of fracture work is positively fascinating.

If the soft tissues bind against the shafts of the nails, cut the soft tissues and relieve the tension. Let the soft tissues fit loose about the projecting nails because this means unqualified comfort after the patient comes out from the anesthesia. I always use an auxiliary splint made out

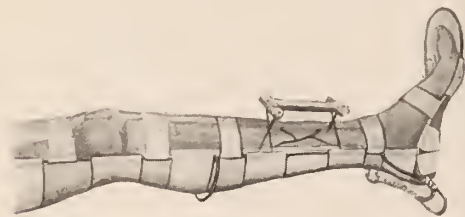


Fig. 3.—Sometimes the bones are badly shattered. In such instances use two unparallel nails, or nails in two unparallel planes at the remote and proximal sides of the fracture zone. A long separation shaft assures constant normal distance until bone union occurs. The splint shown above is strong and simple. It has two transverse legs under the heel to keep the foot in upright position. It has a projection over the toes to take care of the weight of the bed-clothes. If desired an arch above and below the external plate will afford good protection to the plate. Ordinarily the surgical dressings come up flush with the constant distance bars or external bone plates.

of wire and adhesive plaster. I never hide my work in plaster of Paris dressings. If you begin using metal casts or external bone plating you should also begin with wire and adhesive plaster splints. Learn to make them both at the same time and you will take a new and happy interest in bone work. The instantaneous fixation of bone fragments, taking effect the moment the external metal plate is cast and cooled, never fails to send a thrill of accomplishment through the surgeon.

For me to insist that the patients do not suffer pain after this treatment is properly applied would cast an element of doubt as to the genuineness of the entire paper, so I submit this question to your individual patients who will tell you confidentially all that you care to know.

PARATYPHOID AND TYPHOID *

WILL SHIMER, M.D.

INDIANAPOLIS

In 1896 paratyphoid fever was differentiated bacteriologically from typhoid by Achard and Bensaude. In 1900 Schottmuller isolated the *Bacillus paratyphoid B.* from the blood and feces of a patient with clinical symptoms of typhoid. The blood serum of the patient agglutinated the bacillus found in the blood in a much higher dilution than *B. typhosis*.

With the improvement of bacteriological technique, many sporadic and epidemic cases of so-called meat poisonings were found to be due to a bacillus found by Gärtner in meat in 1888 and later named *B. Enteritidis Gärtner*, which is in most instances identical with *Bacillus paratyphoid B.* The *B. paratyphoids* belong to a group of bacteria called the paratyphoid or hog cholera group, bacteria found in typhoid-like diseases in man, in hog cholera, in mautyphoid, in dysentery of calves, and recently in contagious abortion of mares.

Most of the infections in man are due to the *Bacillus paratyphoid B.*, but in India infections due to *Bacillus paratyphoid A.* are very numerous.

Paratyphoid in man usually runs a mild typhoid-like course and it is almost impossible to differentiate it clinically from typhoid. Yet in this class of cases, the disease often begins with chills and high fever. Herpes labialis is frequent in paratyphoid but not in typhoid. The temperature curve in paratyphoid is often very irregular. There is usually no marked enlargement of the spleen. The roseola are usually small and numerous. Marked nervous disturbances are very uncommon.

In addition to this typhoid-like group of cases are others that more generally resemble a severe gastroenteritis. To this group belong the cases due to meat poisoning and cases of unknown origin with profuse rice-water stool, cramping, vomiting and prostration. Complications such as hemorrhages, bronchitis and pneumonia or relapses seldom occur in paratyphoid. One can then classify paratyphoid into three main types:—

1. Clinical type of meat poisoning.
2. Clinical type of gastric disturbance and influenzal disease.
3. Clinical type of typhoid.

* Read before the Indiana State Medical Association, West Baden Session, September, 1913.

The first group is characterized as a sudden illness with high temperature and disturbances of nervous system and the stools resemble those of cholera. The third type closely resembles typhoid. The second type begins with constipation and fever of a shorter or longer duration with disturbance of the nervous system, muscular pains and increased heart action. To this class belongs those of the dysentery type. Some of these cases are complicated by bronchitis, sore throat and meningeal inflammation. Infection due to *Bacillus paratyphoid B.* amounts to from 8 to 13 per cent. of all cases of typhoid. The mortality is not more than 3 per cent.

Most cases of paratyphoid occur in persons ranging in age from 15 to 24 years.

In a large number of cases investigated by Schottmuller 69 per cent. of cases were found to be due to contact with infected persons, 12 per cent. were due to contact with infected food; of the others the source of infection could not be traced.

The best method of diagnosing paratyphoid fever is by the agglutination test, but since serum of such a patient will also agglutinate *B. typhoid* in a dilution of 1 to 100, much higher dilutions must be used. If the serum agglutinates *B. paratyphoid* in high dilutions that no longer affect the *B. typhoid*, the case usually is said to be due to *B. paratyphoid*. The *B. paratyphoid* can also be found in the feces and sometimes in the urine. Many of these cases appear as diarrhea or constipation, loss of appetite, vomiting, gastric pain and, later, loss of appetite. About 33 per cent. of all cases of paratyphoid resemble typhoid, 10 per cent. resemble the meat poisoning type and 57 per cent. are of the mild intestinal disturbance type.

The *B. paratyphoid B.* is widely distributed in nature, occurring as secondary infection in hog cholera, is also the cause of calf dysentery, or pleuro pneumonia and septicemia of calves, of mastitis and enteritis of cows, of mausetypoid, of enteritis of cats, of pseudotuberculosis of guinea-pigs, and of contagious abortion in mares.

As well as being the cause of typhoid-like disease in men, it is also found as a secondary invader in measles, scarlet fever, pneumonia, pleuritis, phthisis, meningitis, malaria, yellow fever, etc. It has also been found in the pus of otitis media, orchitis, cholecystitis, peripoctitis and lymphadenitis.

There are many phases of the epidemiology of paratyphoid still unexplained. As in typhoid, a great many of the infections are due to contact

with persons with paratyphoid or paratyphoid bacilli carriers. But in paratyphoid, infected food plays a very much larger part as a source of infection than in typhoid. So-called ptomain poisoning is practically always due to the meat being infected with some member of the paratyphoid group of bacilli. The infection usually takes place in one of two ways: the meat is soiled with the feces of the infected animal, the meat not being kept at a low temperature, the bacilli multiply very rapidly in it; or the meat is cooked, ground up, and during this process is infected by the person doing the work, and not being kept at a low temperature the meat becomes virtually a pure culture of the *B. paratyphosus*. Even if the meat is cooked and the bacilli are killed the toxins produce serious symptoms. In cases of meat poisoning the suspected meat and the feces of the person affected should be immediately examined for *B. paratyphoid*.

Practically the same sanitary precautions should be taken with a case of paratyphoid as typhoid, e. g., sterilization of feces and urine and forbidding the person doing the nursing to cook for any one else, and vaccination of all the other members of the family against the disease.

The measures necessary to control the spread of paratyphoid are:—

1. Isolation.
2. Disinfection.
3. Bacteriological investigation of the environment.
4. Detection and control of bacilli carriers.
5. Improvement of sanitary conditions.
6. Sanitary slaughter houses and pasteurization of milk.
7. Thorough cooking of all food-stuffs before eating.
8. Protection of food-stuffs against contamination of infected hands and flies.

An attack of typhoid does not protect against paratyphoid infection, neither does paratyphoid infection protect against typhoid. In paratyphoid there is seldom ever second infections or relapses.

The *B. paratyphoid* and *B. typhoid* are closely related, as shown by agglutination and other bacteriological tests, but not identical, as shown by various biological tests.

What has been said before had mostly to do with the *B. paratyphoid B.* The *B. paratyphoid A.* is much less frequently the cause of a typhoid-like disease. The disease caused by *B. paratyphoid A.* more closely resembles typhoid. In all

cases frontal headaches is the rule in the early stages of the fever. The mental condition is usually clear. The onset of the fever is gradual. There is bronchitis and sore throat in the majority of cases in the beginning. The temperature usually goes to 102 to 103 F. by the fifth or sixth day, and a normal temperature is reached in from nine to fourteen days. Relapses are common, often ushered in by a sudden rise of temperature and tenderness of the gall-bladder. The anemia is quite out of proportion to the severity of the disease.

During the summer of 1911 the Bacteriological Laboratory of the Indiana State Board of Health did, along with the agglutination tests with *B. typhosis*, agglutination tests with *B. paratyphoid A.*, and not a single positive result was obtained among several hundred such tests. During the summer of 1912 the same parallel test was made with *B. paratyphoid B.* and there were fourteen clear-cut positives. Already several positive reactions have been obtained during 1913 with the *B. paratyphoid B.*

CONCLUSIONS

1. *B. paratyphoid* and mild typhoid cases are in most instances indistinguishable clinically. The differentiation may be made by the agglutination test or isolating the bacilli from the blood, feces or urine.
2. The *B. paratyphoid B.* is the cause of the majority of paratyphoid infections.
3. So-called ptomain poisonings are due to food, usually meat, being infected with *B. paratyphoid B.*
4. Paratyphoid fever is a much more difficult problem from the hygienic standpoint than typhoid, because the *B. paratyphoid B.* causes diseases in animals as well as in man.

DISCUSSION ON THE PAPER OF DR. WILL SHIMER, INDIANAPOLIS

DR. A. W. BRAYTON, Indianapolis: The day will come when no man can get into the United States Army without having first proved that he has been vaccinated against typhoid. If a man ever dies in the United States army because of these diseases there will be a trial of the medical authorities involved which will make the anarchist trial in our state look like thirty cents.

I had typhoid from the 25th of December until the first day of April. I know what it is to have doctors and friends come into the house and ask Mrs. Brayton if the doctor is getting along all right. I remember particularly Dr. Waterman saying: "You don't understand, you might ask

if the doctor needs a couple of hundred." Supposing a young doctor became afflicted in that way, one who has a great deal depending on him. Typhoid fever costs \$500; that would come pretty hard on him.

My son had typhoid in Spokane. Fifty cents' worth of medicine would have prevented his ever having it, perhaps for years anyway. It cost us \$1,000. That is a good sum of money to lay out for any young man. Sometimes you have to take a long chance on things of that kind.

There are families in which three or four members are laid up with typhoid at a time, everybody in danger, all for a thing that need not have happened. A little preventive medicine costing practically nothing would have prevented such a state of affairs. Wherever I can get a young person over whom I have influence to come to my office, I get him to go to the state laboratory and be given the anti-typhoid vaccine at the expense of the State of Indiana. They make their own vaccine there now from supplies furnished by the government.

There seems to be a lack of faith on the part of the profession in the use of typhoid vaccine, yet we are too generous and too just to attribute this to the fact that there are members who, during certain times in the year, would lay up from \$1,500 to \$2,000 in the care of typhoid patients where unsanitary conditions breed this disease. All this could be prevented by the use of a little common sense and a little preventive medicine. All that these people are doing is eating their own feces and drinking their own urine without having taken the precaution of being given the anti-typhoid vaccine which would have made it perfectly safe for them to go on with filthy habits.

In our own health board organization in this state we have been very successful. It is one of the greatest pleasures which I have in my memory to think of the men who have been instrumental in some way or other in getting things shaped right in those directions. It is such a job that has brought us our well-known state board of health man, Dr. Hurty. We have also had a revolution in a great many other lines of prevention which has made the profession poor in one sense yet richer in another. We won't have a great accumulation of general practitioners in a few years, for medicine is becoming more and more a state function just as it is in England, where twelve to fifteen million people are under the care of the government and where it is now being advocated by some of the highest authorities that a commission be appointed to take charge of the whole subject of syphilis and venereal diseases.

In the address that one of the profession gave before Rush Medical College, attention is called to this fact that in Canada and this country we are drifting to the era of state medicine. There

will be positions for some of us, but there will have to be better men than we have sometimes put through our classes.

It is interesting and startling to hear the discussions on this floor. We all turn around living organisms. Some of us have got the jingle of the times and can say these things over as glibly as you please but we don't know anything about them. It won't be given to us to do anything more than to go on with the persons who are leading us. They are all young men. We are "has beens." Still, they cannot get along without our advice and our support. They do a great many things that they don't know anything about. If there is anything that is silly and foolish and is done without any knowledge of what they are doing, it is this entire treatment by vaccine. Read Smith's paper. If you don't believe it, read any book on immunity and then go ahead and give your damned vaccines if you want to.

These things I am saying this morning are not intended for the public print and the medical journal. They are just the remarks of an old man.

DR. A. E. STERN, Indianapolis: The latter remark is out of order. This discussion ought to go into the press.

DR. F. W. ABBETT, Indianapolis: Just having had a case under observation which was undoubtedly a case of typhoid, it occurs to me that this point should be emphasized, that is, the similarity of paratyphoid and true typhoid fever. In this case that I speak of, the symptoms were identical, all the clinical symptoms were of a true typhoid. The case reached its height at about the end or the middle of the second week and by the end of the third week was entirely recovered. The tenderness which the doctor speaks of over the region of the gall-bladder and colon was very marked and persisted throughout the course of the disease. The odor which we so often note in true typhoid was present to a very marked degree. The eruptions around the mouth and nose were very marked. I think a great many times that we pronounce a case walking typhoid when it is really a true paratyphoid fever. Agglutination tests are always negative. I had it maybe three or four times. The extreme tenderness and distention was what I wished to emphasize.

H. R. ALBURGER, Indianapolis: I have one or two words to say in regard to paratyphoid. When I was pathologist of the State Hospital we had the ordinary methods of examining blood, and the ordinary B. L. test. The first summer we had the ordinary number of cases of typhoid in the hospital, and the agglutination test came up as usual and the diagnosis was confirmed. Then, the next season, we had a multiplication of cases

that were typhoid, as the physicians said, and we didn't get any agglutinations. After four or five cases I made a blood culture of one of them and it proved to be paratyphoid.

Paratyphoid is like the typhoid in its growth in a great many ways and we may be mistaken without giving it the proper test. Unless you make the test with both the typhoid and the paratyphoid organisms there is no need of depending on it for accurate results. I mean that the test should always be made in this part of the country with the two strains, but the ordinary agglutination test with the simple strain of the typhoid bacillus is not of very great value, to my mind.

I want to say a word about Dr. Brayton's last remark. I just came in in time to catch it. I am for it, absolutely, even including the emphasis. That is not a very strong emphasis to put on the matter when you consider the deplorable condition of the vaccine proposition as it is frequently presented to the society. I am not dragging vaccines by their feet. There has been much talk for the last three or four years about the all-curing powers of vaccine. Vaccines are all right in some cases of immunization and in some cases of chronic suppuration which may be improved by vaccines. However, let us be sane and not swing toward extremes by sensational reports from people who are interested. I sometimes make use of vaccines against my will, but I always do it with a sort of an apology because unless the case is one that can be under the observation of a skilled man in the work I don't believe it is much improved by vaccine treatment. Don't be blinded by the glitter of something new until we can really prove that it is something worth while.

I am very sorry indeed that I didn't hear Dr. Shimer's paper throughout, but I am thoroughly in sympathy with the work he is doing.

I want to leave this thought with you in particular about these tests. Don't place too much dependency in them. Don't think that it is something absolutely true. There is no laboratory test that is absolute. Laboratory tests are only additional points. Don't let us get so scientific that we can measure and weigh out diseases. The art of medicine is not being discovered over again. These newer methods are springing up all the time, but let us feel that they are only something added, not something that will explain everything.

W. S. DODDS, Indianapolis: Mr. Chairman, I am interested in this paper and especially as we are face to face, as Dr. Brayton said, with the means of robbing the jingle in our pockets. I

agree with Dr. Alburger in his discussion of vaccine, and with Dr. Brayton, absolutely. Bacterial soup that is being dished up to us in little tubules as a cure-all is an insult to decent medicine, and I am a co-worker in a laboratory, if you please, that makes this bacterial soup.

I believe, however, that there is a place in medicine for vaccine. I know there is a very useful field for its proper use. Still, that case that is going to be benefited by it must be one where the vaccine is selected with some degree of accuracy, and the patient selected likewise, as well as the conditions. It must also be maintained at a certain reasonable condition. I mean by that the physical condition with regard to light, heat and cold. Typhoid fever immunization is done by vaccine and we attempt, in the use of our vaccines, simply to produce the disease a little quicker, whip it a little faster, if you please, and believe me, you can whip these diseases sometimes to the advantage of the undertaker.

If we will bear in mind that in using vaccines we are dealing with poisons always, and that the patient you are trying to cure is having manufactured in his own laboratory some of these same poisons that you are going to introduce, and then weigh out the difference between what the patient is already fighting and make up your mind if he can stand a little more or if the blow will put him down for the count, I believe we will use greater discretion in their use. Now, if you will take these things into consideration and remember in the administration of these antigens that you are dealing with the most powerful poison we know, and that you cannot counteract its action, you will then become reasonable and sane in their use. There is no use in the world in trying to immunize a piece of human machinery that is already worn out. It cannot be done.

C. G. BEALL, Fort Wayne: I don't think there is any doubt but that all of us, or the majority of us have taken care of cases of paratyphoid and not recognized it. In looking back over the history of medicine we will notice that the diseases which are the most severe and cause the largest death-rate are naturally and rightly the ones which the hygienist first tries to combat. As we learn more of the ways by which we can combat these more severe diseases we will come to the milder ones, and undoubtedly paratyphoid belongs in this group of the milder diseases which it is the duty of physicians in general and the state laboratory in particular to help us combat. At first sight the importance of a differential diagnosis between typhoid and paratyphoid to

the individual physician who is taking care of the cases does not seem to be very great, but from the standpoint of preventive medicines it is of vital importance, and for this reason I think the differential diagnosis should always be attempted to be made. It is so easy for all of us who have a most excellent laboratory all the time in the state laboratory at Indianapolis to get this diagnosis and get it accurate. I think we should avail ourselves more and more of this opportunity.

Now, just a few words in regard to the use of typhoid vaccine. I think it should be more generally used in private practice than it is, a great deal more generally used. Its use in institutions is well known. A little personal experience along this line may not be out of place.

While I was resident physician at the Indiana school the records of the institution showed that we had from three to twelve cases of typhoid per year. There are about twelve hundred inmates there. Two and a half years ago they were all vaccinated against typhoid fever. One of the cases occurred away from the institution, and the physicians who diagnosed the case were not absolutely certain of it. However, it was very mild, but we included it in our list anyway. We have saved quite a bit of sickness, and perhaps one or two deaths. In hospitals the nurse particularly is open to infection, for we always find typhoid fever in the general hospital. As Dr. Shimer states, the statistics of eastern hospitals show this, and it is also true of Indianapolis, and at our hospitals in Fort Wayne there are always more or less typhoid fever cases among the nurses. In order to find out the frequency with which nurses in Indiana contract typhoid fever from cases of typhoid fever that they were taking care of, I wrote to a number of nurses in our part of the state and received answers from 100 of them, and out of this one hundred I found that seventeen had contracted typhoid fever while caring for typhoid patients, 4 per cent. having contracted typhoid fever from some other source. You cannot want a better argument than that for vaccinating every nurse against typhoid fever.

Now, in the country, all of you know that there are little groups of farmers in a certain section where every fall there is more or less typhoid. It would seem to me to be a very rational procedure, particularly in this territory where typhoid is an epidemic all the time, to vaccinate these individuals against typhoid. It will unquestionably reduce the mortality rate.

DR. GEO. T. MCCOY, Columbus: I have been interested particularly in the study of tuberculosis

ever since I began the study of medicine. There has been a great deal said about exciting a latent tuberculosis by vaccination against typhoid. I would like Dr. Shimer to answer that point. It is of vital importance. I would like to know whether or not vaccination against typhoid is detrimental to persons suffering from latent tuberculosis, whether it is an excitement to the latent condition.

In vaccinating a number of persons, like the soldiers of our army, we are not very likely to vaccinate any one who has latent tuberculosis, because they are selected very carefully before they are enlisted in the army. However, in applying this treatment to people in the country, where we have no laboratory near at hand, there might be tuberculosis in the family.

This is a question whether to administer typhoid vaccine or not.

As to the difficulty of distinction between typhoid and paratyphoid, I find that since we dropped that old term of typho-malaria, the difficulty is very great. I notice in the newspapers a very prominent gentleman in Indianapolis has been having an attack of typho-malarial fever.

Of course, where we cannot make the diagnosis distinguish between typhoid and paratyphoid, we always charge it up to typhoid anyway.

I hope my question will be answered by Dr. Shimer or somebody else.

C. G. BEALL, Fort Wayne: I am going to say just a word more in regard to Dr. McCoy's question. We had a most excellent opportunity to test that out at the Indiana School for Feeble-Minded Children.

Of course, in any asylum where individuals stay for any period of time, in fact, for their lives, tuberculosis is rife. Among these children, and we call them children from seven to forty-five, we didn't see any cases of tuberculosis which seemed to be excited by the injection of vaccine. Those tuberculous people, and they are always with us, were not running a high temperature, I mean not over $99\frac{1}{2}$, when given typhoid vaccine, but we made it a point to make the dose very small and gradually go up to the maximum dose. We extended the period of immunization over half a dozen or more doses in order to prevent the possibility of a severe reaction.

Now, in regard to the seriousness of these reactions, none of these individuals had a reaction serious enough for a physician to be called to see them. They were taken care of by the attendants, although the rule is, when any child becomes sick,

a physician is called. None of these children were seriously ill, sufficiently ill to demand the attention of a physician.

WILL SHIMER, Indianapolis (in closing): The primary importance, of course, of the paper was to bring out the fact that there are a good many cases of paratyphoid infection. Recent investigations of the feces and urine and blood of patients, even of persons not suspected of having typhoid, shows a tremendous variety of clinical types of typhoid. I think it is also proven that paratyphoid does not differ from typhoid in a quantitative way, rather a difference of etiology, so that making a diagnosis from the clinical symptoms of paratyphoid is a rather uncertain business, because typhoid itself will vary from gastro-enteritis and neurasthenia down to a very difficult case of typhoid, and paratyphoid in the same way varies. Therefore it is particularly important to differentiate clinically paratyphoid from typhoid. The best is the most practical method, of course, and for most men the agglutination test is the best.

Now, as I said before, in 1911, we used the paratyphoid A. and got no positive agglutination. In 1912 we used the paratyphoid B. and there were fourteen positive agglutinations.

Our method of making these tests in the state laboratory is as follows: We make the parallel test of typhoid and paratyphoid B. in the agglutination of one to fifty. If the serum agglutinates typhoid and paratyphoid B. equally, then we make the agglutination of one to one hundred and one to two hundred with these two organisms, then if the serum agglutinates paratyphoid and does not typhoid, we call it paratyphoid fever. Of course, the opposite is true. We know that typhoid is supported and kept in existence by human beings mixing together, but that is not true of paratyphoid. Paratyphoid can be transmitted by animals, by eating raw sausage and things of that sort, also from insufficient cooked food, so that it is chiefly of public health that I am speaking.

I will say that this paratyphoid business has not been thoroughly worked out in Indiana and we hope that, in exchange for the assistance which we give you in diagnosing your cases, you will be good enough to fill out the card thoroughly with whatever information we ask. We hope that it will be cheerfully given us so that we will be able to further benefit these cases and give you some real reliable information on the typhoid and paratyphoid situation in Indiana.

COLONIC ALIMENTATION *

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In many diseases an amelioration or a cure necessitates the placing of the upper portion of the alimentary canal at functional rest for a short or long period of time. In such cases, a variety of methods for the nourishment of the patient have been devised, the most natural and successful of which is the employment of recto-colonic alimentation. It is indicated in the following conditions:

1. In diseases where the most carefully selected and prepared diet cannot be tolerated.

2. In diseases where it is impossible for food to either enter or leave the stomach.

3. In diseases the cure of which or the alleviation of symptoms demands functional rest of the upper alimentary canal for a long or short period of time. In such cases the patient is still able to swallow and willing to do so, but food given by the mouth is liable to produce injury or interfere with the cure of the disease.

4. As a pre- or post-operative treatment in surgery of the upper alimentary canal, it being deemed expedient to maintain or increase the nutrition of the patient, and at the same time to place the diseased part at rest for a few days either before or after the operation has been performed.

In general, therefore, it may be stated that, when for any reason, whatever, nutrition by the mouth is impossible, or when for therapeutic reasons a short or prolonged rest of the upper alimentary canal is indicated, recto-colonic alimentation will prove to be a most valuable asset in the therapy of nutrition.

The question of the absorptive power of the colon is one of great interest to clinicians, and the exact proportion in which the various materials in nutrient enemas are made use of as a food is a matter upon which there exists a marked difference of opinion. While it has been demonstrated that an individual can live and enjoy good health after his colon has been removed, this is no proof of the uselessness of this portion of the alimentary canal. It is by means of the absorption of the water from the intestinal contents

which occurs in the colon that the body is protected against the loss of fluid which would otherwise take place. Great credit is due Leube, Voit, Bauer, Kussmaul, Nothnagel and others who have devoted much time and study to this subject. The investigations of these men have proven most valuable in the treatment of patients in whom nourishment is a matter of extreme importance and the employment of nutrient enemas is indicated. As a result of their numerous and various experiments, we may deduce the following conclusions:

1. Water is readily absorbed, but with greater rapidity upon the addition of sodium chlorid.

2. Alcohol, in the form of wine, whisky or brandy, well diluted, is perhaps better absorbed than anything else except water. It is apt, however, to prove irritating to the mucosa if used too frequently.

3. Peptones are well absorbed, but in too concentrated solutions or in too large quantities they may prove irritating and are not well retained.

4. Milk proteids are not well absorbed. Previous peptonization is advised.

5. Eggs given alone or in pure water are not well absorbed, but if 15 or 20 grains of sodium chlorid are added to each egg they are almost as well utilized as if they had been peptonized. Huber has shown that the addition of salt after peptonization increased their absorption considerably.

6. Raw beef-juice is very completely absorbed, but its prolonged use may prove irritating and produce violent diarrhea.

7. Albuminoids, such as gelatin, are not absorbed.

8. Glucose is well absorbed, but in concentrated solutions it irritates the mucosa.

9. Starch seems to be fairly well absorbed, even in the raw state, and is not at all irritating. It is readily absorbed when it has been previously acted upon by ferments.

10. Fats cannot be handled to good advantage and should be employed in as small quantities as possible. It has been demonstrated that the colon can absorb a small proportion of fats with a low melting point provided they are emulsified.

It may, therefore, be considered as an established fact that the addition of sodium chlorid facilitates absorption of nutritive enemas. It must also be concluded that peptonization of proteids increases their absorption very much.

* Read before the Indiana State Medical Association, at West Baden, September, 1913.

While authors may vary in their views as to the amount of the proteids, carbohydrates and fats which are absorbed by the rectum and colon; yet they are of one and the same opinion, that if properly proportioned and care exercised in the technic of administration, nutritive enemas are absorbed to a considerable degree.

It has long been the popular belief that they are absorbed chiefly in the large intestine, and that the ileo-cecal valve prevents the entrance of food from the large to the small intestine. Grützner, however, has shown that particles of any material, dissolved or suspended in physiologic salt solution, when introduced into the large intestine, may, under certain conditions, even reach the stomach. If a distilled water, hydrochloric acid, or potassium chlorid solution was employed as the vehicle, the results were negative. He injected an emulsion of starch in physiologic salt solution into the rectum, and succeeded in finding starch granules in every microscopic examination he made of the stomach contents that were removed several hours later by aspiration. As a result of these experiments, he is inclined to attribute this peculiar and surprising reverse movement to the presence of sodium chlorid. He bases his assumption on the fact established by Nothnagel, that stimulation of the serous membrane of the intestine by sodium chlorid may produce antiperistaltic movements of the bowel. He is of the opinion that the whole mass injected into the rectum is moved upward into the small intestine and is there absorbed in the normal manner. Swiezynski concluded that nutrient enemas do not benefit the system because they are absorbed in the large intestine, but because they reach the higher portions of the intestine and are absorbed there. It is difficult to state how true these assumptions may be, but Voit and Bauer obtained negative results without the use of sodium chlorid and positive ones with it. The writer is not inclined to accept the antiperistaltic theory, but rather agrees with those who think it more probable that the surface epithelium of the intestine is chiefly concerned in causing the movement of material against the direction of normal peristalsis.

By means of the x-ray, Hemmeter observed that the upward movement of the injected particles goes on simultaneously with the downward movement of the feces. In other words, there is an upward marginal current. He considers the epithelium and muscularis mucosa instrumental, and says that it is not true antiperistalsis.

Whichever explanation we accept, the fact that material injected into the rectum may and does at times appear in the small intestine, and even in the stomach, is fully established by experiments. In radiographic work on the colon it has been observed by the writer that bismuth enemas travel rapidly upward toward the ileo-cecal valve, and in a small percentage of cases the radiograms have shown a bismuth shadow to be present in the lower portion of the ileum. It must, therefore, be admitted as a well established fact that material introduced into the rectum may reach the small intestine and even the stomach. It must also be admitted that in such cases some of the material is absorbed in the small intestine. Swiezynski's conclusion that nutrient enemas do not benefit the system because they are absorbed in the large intestine, but because they reach higher portions of the intestine, cannot be accepted. Until more satisfactory evidence is produced, it will be well to hold to the belief that the beneficial results secured in the employment of enemas are due almost wholly to the fact that they are absorbed in the colon. As further evidence of this fact, Dr. James P. Tuttle cites two cases in which right inguinal colotomies were done for carcinoma of the transverse and splenic colon. "The patients were nourished for considerable periods of time by the use of nutrient enemas on account of secondary and reflex involvement of the stomach. In these cases it was absolutely impossible for the alimentary substance to pass beyond the artificial anus, and consequently the nutrition obtained was beyond question due to the absorption from the colon itself."

The absorption of the same enema in different patients is very different. As a result, the calories that can be introduced into the body in a day vary greatly in different individuals. It is well to bear constantly in mind the fact that the exclusive employment of nutritive enemas covers only a small part of the calorific requirements of a patient. Full nutrition is almost never attained. In order that an adult may gain strength, approximately two pints of nutritious fluid must be taken by the mouth in 24 hours. In recto-colonic alimentation, under the most favorable conditions, we are scarcely able to cause an absorption of more than 500 calories in the 24 hours. This is only about one-fourth, or at the most one-third, of the amount required by a patient who is kept warm and at absolute rest.

While the above figures are exceedingly interesting, and it is well that we keep in mind the calorific value of a nutrient enema, we should not overlook the fact that its non-irritating action and the possibility of its being retained is of the greatest importance. Even when the greatest care is exercised in preparing the rectum and colon for the reception of food; even when the food has been carefully selected and prepared; even when only small quantities are used, and we are provided with all the skill that a careful and competent nurse can exercise in the work, it must be admitted that recto-colonic alimentation ranks a poor second to feeding by the mouth, and failure to secure the much-desired results is not infrequent. In some patients it meets with little success or absolute failure from the very beginning; in others, it proves to be a practical method of great value. Therefore, when indicated, owing to the different inherent power in different patients, one cannot prognosticate the value of the procedure. Much will depend upon an existing healthy condition of the rectum and colon, and we should never forget the tendency of certain foods to produce irritation. In some cases, there is so little absorption of food, or the rectum and colon become intolerant so quickly, that it is of no value whatever, and has to be discontinued. In other cases, it may be continued with gratifying results and success for a long period of time.

While clinicians vary considerably in their methods of administering nutrient enemas, it is always important that the rectum and colon be prepared for their reception. This is best accomplished by giving a cleansing enema of normal salt solution. Many advise that these cleansing enemas be given hot, but my personal experience corroborates the statement of Tuttle that if given cold they act more promptly and effectually, and seem to render the rectum and colon more tolerant, so that the nutrient enemas are better retained. In addition to evacuating the lower bowel of all foreign matter, and exerting a beneficial effect upon the mucosa, these saline enemas undoubtedly increase the absorptive power of both the rectum and colon. Enemas, which tend in any way to irritate the mucosa should not be employed for cleansing purposes. This contra-indicates the use of the soap-suds enema which is so frequently prescribed. In the average case, at least one cleansing enema should be given daily, and it is well to wait one hour before the first nutrient enema is administered. In some patients it may be necessary to employ

the cleansing enema previous to every rectal feeding. In such cases, the rectal and colonic mucosa are exceedingly irritable and intolerant, and if the cleansing enema be given several times daily it gives the rectum and colon no opportunity to regain their quietude, and recto-colonic alimentation can be carried on for only a few days at the most.

As to the size and the number of nutrient enemas which should be given daily there is a marked difference of opinion. Some clinicians prefer the larger enemas and as few as possible, while others prefer the smaller and repeated every few hours. No definite rules for guidance can be formulated, as it is well known that the same enema may not act the same in different patients. Therefore, the size and number which should be given daily must depend upon the experience in individual cases.

When recto-colonic alimentation is indicated, it is the routine practice of the writer to begin with one of the smaller enemas, and, in order to ascertain the tolerance of the rectum and colon, to prescribe not more than three during the first twenty-four hours. If they be well-tolerated, an additional enema is prescribed during the next twenty-four hours. If these produce no symptoms of rectal or colonic irritation, the number is gradually increased until they are being administered every three or four hours. The formula usually employed is as follows: beef-peptonoids or a solution of peptones, 2 to 3 ounces; 15 per cent. solution of glucose, $\frac{1}{2}$ to 1 ounce; normal salt solution, sufficient to make 4 to 6 ounces.

I am rather partial to the small nutritive enemas, especially in the beginning of recto-colonic alimentation, and would recommend their use to those who are still somewhat pessimistic as to the value of this method of feeding. If after a few days' trial these smaller enemas have been well borne, one of the various larger enemas which have been recommended may be employed. However, not more than two, or at the most three, of these should be prescribed in the first twenty-four hours, as more food can be administered and greater tolerance secured than if we attempt to force nutrition.

In some cases, it will be necessary to omit or decrease the quantity of certain constituents which excite peristalsis, or it may be necessary to add some form of opium in order that the enemas will be retained. It is the custom of some clinicians to precede the nutrient enema by some form of opium, usually in starch paste or suppository. This is objectionable both on

account of the systemic effect and the local sedation of function. In recto-colonic feeding it must be conceded that the individual case must decide what elements are most necessary. In some cases, enemas which are stimulating in character or which will tend to fill the blood vessels are indicated, at least temporarily, more than are the nourishing enemas. In exhaustion from hemorrhage, 8 ounces of a warm physiologic solution may be used and repeated if necessary, every three or four hours. To this may be occasionally added 2 ounces of alcohol in the form of wine, whisky or brandy. In cases of shock or collapse, $\frac{1}{2}$ pint of hot black coffee, to which is added 2 ounces of whisky, may be administered, and repeated as deemed necessary. Unfortunately, in some cases, even from the very beginning, the use of enemas, either nourishing or stimulating, prove a failure and has to be discontinued. It is well, however, to persevere even if the first few enemas are rejected, and endeavor to find amongst the various formulas recommended one that will suit the particular case.

As to the technic which should be employed in the administration of nutritive enemas, much has been written that tends to make it a somewhat complicated as well as a difficult procedure. If some of the presumably good advice on the part of certain writers is followed, it is very easy to ascertain why more successful results are not secured. For example, it is advised that the rectal or colon tube be introduced high up into the bowel, the distance suggested or advised being anywhere from 10 to 20 inches. To those who continue to believe in their ability to introduce a soft colon tube high up into the bowel, I would refer them to the radiographic findings of those men who have experimented along this line, and whose radiograms demonstrate clearly the tube coiled upon itself in the ampulla of the rectum. Further, when the distal end of the colon tube is honestly believed to be high up in the bowel, the introduction of the index finger into the rectum will easily and quickly determine the truth or fallacy of this belief. In the larger proportion of cases it will be found to be coiled upon itself in the rectal pouch. These statements, of course, refer to those cases in which the tube is introduced without the previous introduction of the sigmoidoscope.

Even though the high introduction of the tube were possible in every case in which recto-colonic alimentation is employed, we have abundant evidence that such a procedure is not indicated, and, in fact, is really contra-indicated. As previously

stated, the tendency of an enema (nutritive, stimulating, cleansing, or bismuth) is to travel rapidly upwards toward the ileo-cecal valve. This has been demonstrated by radiographers to take place even though no position of the patient is assumed which will favor its ascent by gravity. When the nutrient enema is injected or forced quickly into the sigmoid flexure or descending colon, it is more likely to excite peristaltic action and be rejected than if it is introduced slowly and gently into the ampulla of the rectum and permitted to find its way upward into the bowel. These enemas, in themselves, are not soothing to the mucosa; hence why should we attempt the high introduction of an additional foreign body, in the form of a rubber tube, whose only tendency will be to defeat the results for which we are striving.

The following method of administering a nutritive enema is advised: The patient is placed on the left side with the knees drawn up against the abdomen, and the hips elevated upon a hard cushion or pillow. A No. 10 or 12 size catheter, or small colon tube, or No. 5 Wales bougie, well-lubricated with some non-irritating material, is introduced into the rectum to the distance of about 3 inches, so that its end is just beyond the internal sphincter muscle. To the proximal end of the catheter, colon tube, or bougie, is connected a rubber tube of suitable size and length, and connected with this tube is a funnel of from $\frac{1}{2}$ to 1 pint capacity. A glass funnel is to be preferred, as it enables one to determine readily how rapidly the enema is being introduced, and whether there is any tendency to a backward flow and its being rejected, etc. The procedure can easily be carried out by means of the ordinary fountain syringe, a Davidson's syringe, or any of the hard-rubber or glass piston syringes of sufficient capacity. It is important that the tube introduced into the rectum should be small and smooth so as to avoid any irritation of the anal canal.

The nutritive enema, thoroughly mixed, is held in a pitcher, from which it is poured into the funnel. The funnel is then elevated so that the contents can run very slowly and with the utmost gentleness through the tube. It matters not what apparatus is employed, the rule of introducing or injecting slowly and gently into the ampulla of the rectum should be followed in every case.

The solution or mixture should be given at a temperature of from 98 to 100 F., as hot or cold solutions tend to stimulate peristaltic action

and should not be employed. If the above plan is followed, it will rarely be necessary to use the much-advised folded warm towel to make pressure against the anus, or to hold the buttocks together, in order to prevent the enema from being ejected. In addition, it will be possible to dispense with the use of the opiate preparations in many cases. If the opium is demanded, tincture of opium in 10 to 20 drop doses may occasionally be added to the enema when it is ready for administration.

After the introduction of the nutrient enema, the patient should remain quiet for from one-half to one hour, and exert as much as possible of his or her inhibitory powers to assist its retention. Successful results imply regular retention for from two to four hours, depending upon the size of the enema employed. Endeavor should be made that they not only be bland and nonirritating in character, nutritious and easily absorbed, but that they be given in as condensed form as possible. When it is necessary that they be continued for a long period of time, it is a good plan to change their character from time to time, as it will obviate irritation of the rectum and colon.

The material of which nutritive enemas are composed is capable of almost unlimited variation. Nearly every writer has formulated some favorite prescription of his own, of which some are too low in caloric value and others again are too bulky to be safe for continued use in the average case.

In conclusion, we should not forget that any method of treatment which may and does in not a few cases prove repugnant both to patients and attendants, and is not easy of performance, is very liable to fall into disfavor unless permanent beneficial results are secured. As a result, the careful selection and preparation of the nutritive enema to be employed, and the skill with which it is administered, are factors which will determine largely the success or failure of this method of nourishing a patient. While absolutely nothing can be promised, so far as supplying the calorific requirements of a patient is concerned, the careful observations and experiments of the most noted writers upon this subject have demonstrated that in recto-colonic alimentation we possess a method of treatment which is of much value in a certain proportion of cases. In what cases it will prove of value can be determined by trial only. Its value as a therapeutic agent in certain cases can no longer be questioned, and it is astonishing that it is not more universally employed.

DISCUSSION ON DR. GRAHAM'S PAPER

Dr. W. T. S. DODDS, Indianapolis: A great many of us have had a wrong idea about colonic feeding, and have not resorted to it in nearly as many cases as we should. There are more instances in which colonic feeding or colonic enemas are of value than are generally accepted. In low-grade forms of anemias, in some of our more chronic and persistent diseases, as tuberculosis, colonic feeding becomes a very valuable asset to the physician, and is of most positive benefit to the patient. We can use it for short times, and sometimes much longer times, and we can get considerable result from medication, using with our enemas some tonic of non-irritating composition. The increased activity with which salt added to the enema is absorbed is astonishing. In all low-grade anemias, where digestion is impaired, it will surprise you by giving enemas with egg and salt to see the increase in the patient's weight. Most tubercular women object to the taking of sufficient quantities of egg. It is worse than medicine to them. If you can bring up the nutrition and get your patients to bring themselves up by this colonic alimentation by the feeding of egg, then we have accomplished our object much sooner than we would have by passing the food from the mouth to the stomach.

THE SUGAR CONTENT OF THE BLOOD

F. C. McLEAN, Portland, Ore. (*Journal A. M. A.*, March 21), describes the method of finding the sugar-content of the blood and points out the clinical value of its determination. The method of Bertrand is most accurate in his opinion for the determination of glucose in small amounts, and he gives it in detail. The amount of sugar in the blood does not exactly correspond with that in the urine which has been customarily tested by clinicians, and the blood test is of value aside from its physiologic interest, especially in the diagnosis, prognosis and control of treatment in cases of diabetes mellitus. The finding of hyperglycemia alone does not prove the existence of the disease, as its transient occurrence may be due to other causes. If, however, it remains persistent after the withdrawal of carbohydrates from the diet for twenty-four hours or more, the case should be regarded as diabetes, even if the glycosuria disappears. Excessive sugar in the blood is the primary condition, and the tolerance to carbohydrate should be determined by its behavior. A patient may have a constant blood sugar-content of 0.18 per cent., or even more, without sugar in the urine. The diet should be regulated accordingly and not depend on the urinary finding. The blood examination may also help the prognosis in these cases, as recently shown by Frank, in most cases of glycosuria in pregnancy, the blood-sugar remains normal or is even diminished following the purely renal character of the disease. In cases of transient hypoglycemia and hypoglycosuria blood examinations may be valuable in the diagnosis as well as in cases of cerebroglycosuria which may have to be distinguished from diabetes.

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EDITORIALS

TONSIL AND ADENOID SURGERY

Out of the great mass of recent literature on the tonsil a few facts may now be considered well established:

1. The exact function of the tonsil is not known.

2. When diseased the tonsil becomes a menace to health, and often to the life of the individual. Impairment of health arises through general infection from the tonsils with resulting symptoms of malaise, local and general pains, "rheumatic" affections, etc. Death may result from quinsy, tuberculosis, sepsis, endocarditis or nephritis.

3. Formerly the greatly hypertrophied tonsil only was looked upon as diseased. To-day the moderately enlarged, submerged and ragged tonsils with large, deep, hidden crypts are considered of greater menace to health.

4. While no apparent harm results from removal of healthy tonsils it is unwise to extirpate the normal glands.

5. When diseased, either because of hypertrophy, or the retention of diseased products in the tonsillar crypts, the benefits resulting from complete removal are proven beyond question.

6. When diseased the tonsil should be removed entirely and not merely "clipped."

Laryngologists, especially in America, almost without exception, advocate the complete removal of the diseased tonsil, whether large or small. There is much difference of opinion as to the technic, but nearly all agree that the gland should be removed together with its capsule, and not merely cut off as was formerly done. Enucleation of the tonsils, together with the adenoid, which, when present should be ablated at the same operation, places this surgical procedure in the class of near major operations, if not a major operation itself. Since, therefore, it is a performance of magnitude and possible danger, the notion formerly held, and still unfortunately held by many, that the removal of tonsils and adenoids is sim-

ple and may be done by any physician, anywhere and under an indifferent environment, should be revised. Numerous deaths have occurred during or soon after these throat operations. Several such deaths, usually unreported, have occurred in Indiana. Dr. Chevalier Jackson of Pittsburgh has reported six cases of tonsil hemorrhage in which it was necessary to ligate the external carotid artery to save the life of the patient. Laryngologic literature abounds in reports of serious hemorrhage, both immediate and secondary, occurring as a result of tonsillectomy and adenoidectomy. Equally serious bleeding as a result of tonsil "clipping" has also been reported. Such occurrences as these should be sufficient to call a halt to the attitude of indifference taken by the profession concerning the necessity of serious thought and preparedness on the part of the surgeon before attempting this class of work.

Aside from the question of danger the proper removal of tonsils and adenoids is a fine art. It is not merely a question of getting the offending glands out at all hazards, but the question rather, of doing so without injury to the adjoining healthy parts of the throat. The thorough removal of the tonsils may cure a chronic infection of the individual, but if the pillars of the pharynx are mutilated, the patient may be worse off, especially if a singer or public speaker, than before the operation.

That much tonsil and adenoid surgery is needed few will question at the present time. That it is often needlessly done by the overzealous operator can scarcely be questioned. That much is only partially done and indifferently executed because of lack of training or indifference on the part of the operator is in daily evidence. How often is the expression heard concerning individual cases that the tonsils were removed but that the patient was since worse than before the operation. In such instances investigation will show that the work usually was unskillfully and imperfectly done. There is no more satisfactory surgery, to patient and surgeon alike, than that under discussion, when properly planned and skilfully executed. Tonsils and adenoids do not "grow back" if once they are really removed. Quinsy or tonsillitis is impossible after a complete operation. Instances of recurrence are evidence that the work was but indifferently planned and indifferently executed. When performed under such circumstances by those having no training, or by those "trained" in a six weeks' course of postgraduate instruction, the tonsil and adenoid operation is often nothing more than a surgical blunder.

The rather prevalent belief that the home or the physician's office is a suitable place for the performance of throat operations is unfortunate, and especially is this true when an anesthetic is given, which is usually necessary. With well-equipped hospitals in all the larger cities and many county seats there is no longer an excuse for operating elsewhere. While there is some risk in these operations when performed under the most favorable circumstances, such risk is undoubtedly greater in the home than in the hospital. A trained anesthetist is necessary both to the safety of the patient and the success of the operator. Many surgical procedures may be carried out satisfactorily under indifferent anesthesia, but this is not true of operations in the throat. Perfect work and skilled administration of the anesthetic are both essential here. A large majority of the leading American laryngologists believe that the modern practice of laryngology demands thoroughness in diagnosis, ample training of the surgeon and the abandonment of the home and office in favor of the hospital. The public will, we believe, approve and even demand that such precautions be taken when once it is familiar with the actual facts.

JOHN F. BARNHILL.

THE SERODIAGNOSIS OF PREGNANCY

The question of diagnosis is always one of absorbing interest and such laboratory aids as the modern medical man is able to command are oftentimes invaluable. The Abderhalden test for pregnancy in the case presenting difficulties of diagnosis is delicate and reliable.

There are certain established properties of the blood which are recognized as being the result of protein injections. Among these are precipitins, agglutinins, anaphylactogens, etc. Abderhalden has proved by parenteral injection that there is a ferment developed in the blood which is specific and protective against possible toxic effects of such foreign matter. He also claims that substances developed physiologically in the body elaborate also their specific ferment. This work is the basis of his serodiagnosis. He claims that with the growth of the placenta there is normally present a ferment in the blood which is capable of digesting the syncytial cells which are thrown off from the placenta into the blood stream.

The test is purely chemical and very simple. The placental tissue is prepared in a given way and one gram of it is placed in a previously

tested dialyzing thimble and 2 c.c. of perfectly clear serum are added. The whole is placed in a standard containing about 20 c.c. of sterile water overlaid with toluene to prevent putrefaction. This is incubated for not less than eighteen hours nor more than twenty-four, at the end of which time the dialysate is tested with ninhydrin. If cleavage has taken place, the ferment being present in the serum, peptone is found present. If digestion has not taken place, nothing will have passed over, and the diagnosis is negative. The test is very simple, and may be made with ninhydrin or the biuret reagents or any of the well-known tests for peptone.

Certain precautions must be taken in the work. For instance, the amino acids from the alpha position to the carboxyl group will give the same reaction, so that the blood must be withdrawn at a time separated from the period of digestion. Also all the work must be done under sterile technic. If these precautions are followed, the Abderhalden test will be found accurate and easier of accomplishment than the Wassermann.

It is an important diagnostic measure in surgery and in medicolegal work. It will accurately differentiate a pregnancy from a menopause, and will discover a second pregnancy following so closely on the first that the usual signs of pregnancy are doubtful or absent. It will disclose a recent abortion. It is a reliable diagnostic agent in differentiating between the uterine enlargement due to a possible pregnancy from that caused by a fibroid or a carcinoma. In this case we have, however, another differential agent in the Abderhalden test for carcinoma, a more recent development than the test for pregnancy.

The technic of the Abderhalden test for carcinoma is in every way similar to that for pregnancy, except that where placental tissue is used in the one, carcinomatous tissue must be used in the other, and it must be homologous tissue, namely: Tissue from a mammary cancer must be used in the diagnosis of breast tumor, uterine carcinoma for uterine tumor, etc. It is only of value early in a carcinoma before the development of cachexia; cachexia being an indication that the ferment, which is not only specific but also protective, has been used up. This is, however, no drawback, for diagnosis is usually no longer doubtful by the time cachexia is established.

It is not worth while to try to make a diagnosis under six weeks, because of the fact that there is not enough placental growth to establish the ferment in the blood. However, results have been made as early as four weeks, and have sub-

sequently been proven correct. It will give a positive test within two weeks following the emptying of the uterus. The serodiagnosis of pregnancy is being used as a routine in many of the large hospitals throughout the United States and abroad. It is invaluable to obstetricians and gynecologists. Any new means of diagnosis which is specific and reliable adds to the efficiency of modern medicine and helps to place it among the exact sciences.

J. M. KETCHAM.

SAFETY OF SALVARSAN TREATMENT

It probably will be years before the many questions which arise in connection with the use of salvarsan and neosalvarsan in syphilis are settled. Will one of these drugs be used exclusively in the treatment of syphilis, or will they be used in connection with mercury, or will they be discarded altogether and our reliance placed on mercury and the iodids? Are the dangers connected with the use of these drugs sufficient to warrant our not using them? Are the dangers avoidable? Time only will answer the first group of questions. Up to the end of the year 1912 considerably over one million doses of salvarsan had been sold and there had been reported in the literature fifty deaths following its use. A number of these deaths occurred a considerable length of time after the drug was used. Even though all the deaths could be directly attributable to the drug, this is a better mortality rate than that for ether anesthesia. The studies of Professor Wechselmann (*The Pathogenesis of Salvarsan Fatalities*) answers the last question in as far as it can be answered at this time. His studies concern themselves principally, not with technical errors, such as living or dead bacterial contamination of the distilled water, mistakes in preparing the salvarsan solution, or overdosing, but with those cases in which these errors are eliminated, and still unfavorable or even fatal results have occurred a variable length of time after the injection. The data on which he bases his opinions are extensive and very carefully studied, so that his conclusion that "insufficiency of the kidney, and not hypersensitiveness of the brain, is the point of the entire question of salvarsan fatalities," must receive very serious consideration. This of course is radically different from the prevailing notions of the cause of salvarsan fatalities. Salvarsan itself is largely excreted by the kidneys, and is often somewhat irritating, as is shown by the not infrequent

polyuria after injection. This mild irritation in an already damaged kidney is sufficient to turn the scale and incite serious uremic symptoms. A great deal of stress is placed on the rôle that mercury plays in damaging the kidney, thereby making those individuals who have taken mercury unfavorable subjects for salvarsan therapy until there is strong evidence that the kidney function is not impaired. It is to be hoped that time and experience will confirm his opinions, because comparatively simple tests for kidney function will disclose these damaged kidneys, and the administration of salvarsan should be postponed until a more favorable time or else a very small dose given and its effects on the kidneys carefully noted.

CHAS. G. BEALL.

MISUSE OF THE RED CROSS EMBLEM

The advertising doctors of Indiana are violating the law in using either the name or the emblem of the Red Cross. The act governing this reads in part as follows: "It shall be unlawful for any person within the jurisdiction of the United States to falsely or fraudulently hold himself out as or represent or pretend himself to be a member or an agent for the American National Red Cross for the purpose of soliciting, collecting or receiving money or material, or for any person to wear or display the sign of the Red Cross or any insignia colored in imitation thereof for the fraudulent purpose of inducing the belief that he is a member or an agent for the American National Red Cross. It shall be unlawful for any person, corporation or association other than the American National Red Cross and its duly authorized employees and agents, and the army and navy sanitary and hospital authorities of the United States, for the purpose of trade or as an advertisement to induce the sale of any article whatsoever or for any business or charitable purpose to use within the territory of the United States of America and its exterior possessions the emblem of the Greek Red Cross on a white ground, or any sign or insignia made or colored in imitation thereof, or of the words 'Red Cross' or 'Geneva Cross' or any combination of these words. * * * If any person violates the provision of this section he shall be deemed guilty of a misdemeanor, and upon conviction in any federal court shall be liable to a fine of not less than one or more than five hundred dollars, or imprisonment for a term not exceeding one year, or both, for each and every offense."

It has been quite a common practice of some drug stores and certain advertising doctors to use the Red Cross insignia, and it will be seen that such practice is a violation of the law. Even physicians who have been putting the Red Cross emblem on their motor cars are guilty of violation of the law and can be prosecuted if the matter is reported to the department of justice for legal action.

THE ERADICATION OF HOOK WORM DISEASE

The Rockefeller Sanitary Commission for the eradication of hook worm disease has issued its fourth annual report covering the year 1913. The report gives some very interesting information and indicates one of the many avenues through which the Rockefeller funds are being used to further public interests. The report shows that during the year 1913 nearly 500,000 examinations were made and practically 187,000 treatments given at a cost to the commission of about \$196,000. This means that for every forty cents expended by the commission a person was microscopically examined, and for every \$1.05 a human being has been treated and benefited in health and helped to a better scale of living. Considering that the various states have expended amounts ranging from about \$200 to \$8,000 it can be readily seen that the expenditure of nearly \$200,000 by the commission has helped the eradication of hook worm disease in a manner that was absolutely impossible at the hands of health boards with their niggardly appropriations. As to the prevalence of hook worm disease, the report shows that in 413 counties in the eleven southern states there have been examined to date 415,250 rural children, of which 180,374, or 43 per cent., were found infected. This is a reduction of 12 per cent. from the 55 per cent. infection found among the 156,019 children examined and 85,909 found infected prior to 1913. The educational propaganda for putting a stop to soil pollution has been by visits, letters and bulletins, public lectures before teachers and school children, and articles in the public press. In concluding the report the secretary says that he has not been able to escape the conviction that improvement in sanitation is not resulting so rapidly as is desirable. The lay mind is aroused in the face of an unusual epidemic that affects business, but seems fairly well contented to let long existing conditions continue if the annual death rate is not much higher than usual, despite the fact that this rate may

be unnecessarily high. The secretary then makes a very pertinent statement, which does not speak well for the medical profession, when he says, "An active desire for better sanitation in this country is found largely among *a relatively small proportion of the medical fraternity*, [italics ours] in a relatively much greater proportion of the public school teachers, and in some members of women's clubs. The average American has very little idea of sanitation and very little interest in it. Two important new developments are, however, the increased interest among certain life insurance companies and certain senators and congressmen, exhibited along lines of education for better health protection." The secretary says that the slowness of improvement in sanitation in the last thirteen years in the United States is a very distinct disappointment, but he is persuaded that a new test by which the commission can state to the mothers that it has proof that their sons and daughters have actually swallowed material that has come from the bowels of some other person (though we cannot state whether that other person was white or negro), places at the disposal of the commission a method by which it can, in the next thirteen years, create a more active and more intelligent demand for sewer connections or for the sanitary privy than has resulted through the past thirteen years' work. The report is liberally illustrated with pictures showing the effects of the hook worm disease in a large number of people of all ages and sexes.

EXPLOITING THE FRIEDMANN CURE

The Friedmann cure dies a hard death, but considering the amount of money that has been invested in the enterprise, it is easy to understand why the promoters are resorting to all sorts of promotion tricks to secure some return upon the investment. Recently sensational statements appeared in some of the New York newspapers to the effect that upon the occasion of the annual meeting of the Association of German Sanatorium Physicians, 120 of those present reported that they had carefully investigated the results of Friedmann's work and that out of 40,000 cases treated with Friedmann serum the success has been simply phenomenal. It was stated that Dr. Friedmann had been the guest of honor at a banquet given by the Sanatorium Physicians and that he had received effusive thanks for his discoveries, etc. It was also said that Dr. Friedmann had made the statement to the American press representative that Prof.

Ehrlich had expressed the opinion that the Friedmann serum is absolutely harmless. As an after-math, Dr. S. A. Knopf publishes a letter in the *Medical Record*, of April 18, in which he gives the facts as obtained in response to communications addressed to the officers of the Association of German Sanatorium Physicians, and others capable of giving information concerning the newspaper reports which gained such wide publicity in this country. To quote from Dr. Knopf's communication: "First of all, the officers of the Association expressed their astonishment that the visit of the Sanatorium Physicians to the Friedmann Institute should be used as a means of advertising Friedmann and his remedy abroad. Because of the reports of cures which constantly crept into the German medical and lay press, and the demands for the remedy from many sanatorium patients, it was natural that the sanatorium physicians while visiting Berlin should wish to see for themselves what was going on in the Friedmann Institute. Thus, they asked Friedmann to show them his cases and give them a talk on the indication for his remedy. About sixty of the hundred and twenty-five members of the Association visited the Friedmann Institute on February 26 and 27, 1914. They distinctly stated that their visit was in no way to be considered a pilgrimage to pay homage to Friedmann for his discovery but rather an investigation to find out just how much truth there was in his claims. Many had already tried the remedy and had been disappointed, others were prejudiced, and it is for this reason that they wanted to examine critically into Friedmann's claims. It is absolutely untrue that a banquet was given to Dr. Friedmann." A pertinent paragraph in the communication received from the German physicians is translated as follows: "We were of the unanimous opinion that the cases shown by Friedmann had been clinically very badly observed, and as a whole could not be considered as successes. We were astonished that no carefully recorded temperature and weight curves were shown. The x-ray plates which were shown to us as evidence of cures did not actually prove anything whatsoever. We will admit that some cases indeed made an impression upon us, but here we must also remember that such cases occur without any treatment or with any kind of treatment, and that the number of them was altogether too small to permit of a favorable judgment of the value of the remedy." Dr. Knopf cites the unfavorable reports on the Friedmann treatment given by a number of German investigators, some of which claim that cases treated with the Friedmann serum were actually

made worse. He concludes as follows: "In paying a gratifying tribute to the earnest and unbiased work done with Friedmann's serum by American investigators, which likewise gave unfavorable results, Professor Brauer advised me, in the interest of the German medical profession, and especially in the interest of the unfortunate patients who naturally are inclined to accept such advertised endorsement as genuine, that it would be most desirable for the present status of the Friedmann remedy in Germany to be made clear to the medical profession and the laity." So far as we are able to determine, the Friedmann cure is a snare and a delusion. It has nothing upon which can be based an opinion which indicates that the serum is beneficial in the treatment of tuberculosis, and there is much evidence to condemn it. The attempt to exploit the serum in this country by commercial methods deserves severe condemnation, and the medical profession and public alike should be warned of the dangers in placing confidence in the claims that are put forth purely for financial gain.

EDITORIAL NOTES

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE War Department has found the medical profession ready to serve in the field in our Mexican trouble. Already hundreds of doctors have volunteered their services, but in all probability there will be little demand for other than the regular medical and surgical departments of the army and navy.

O. D. BROWNELL, chiropractor of Warsaw, was prosecuted for practicing medicine without a license. A disagreement of the jury is in a way a victory for the defendant. The defendant and his friends announce their intention of having the next legislature pass a law which will especially allow for the licensing of chiropractors.

It may be a long time until September, but it is not too soon to begin preparing papers for the La Fayette session. The program committee is anxious to have a good program. Don't offer a paper unless you have something to say, and don't say anything unless you have made some preparation for it.

IN this number we print a communication from one of our subscribers concerning the advisability of having the office hours given in all professional cards in the Physicians' Directory. The suggestion is a good one, and a sufficient reason for stating the hours in the professional cards in *THE JOURNAL* is given by our correspondent.

OUR anti-vaccination friends have had nothing to say about the order from the war department which demanded that all troops going into Mexico should present evidence of recent vaccination against small-pox, and in addition to that, recent vaccination against typhoid. When the government takes a firm stand of this kind it ought to have some influence with people who honestly believe that vaccination of any kind is superfluous.

THE daily newspapers announce that the blackmailing scheme to which our readers' attention was called a few months ago is still being worked in Indiana. We hope that any doctor who is approached by a young woman asking that an abortion be performed will at once take steps to investigate the case and if possible determine whether the case is a blackmailing scheme or not. There should be some way of putting a stop to this blackmailing work.

The Council on Health and Public Instruction of the American Medical Association has established a Medico-Legal Bureau for the accumulation of information regarding public health legislation. It is hoped that ultimately this will grow into a bureau large enough to furnish information, references, briefs, and legal advice on all medico-legal subjects of interest to physicians. It is one of the avenues of expansion on the part of the A. M. A. for the benefit of the medical profession and public alike.

TO COUNTY SECRETARIES.—You are hereby respectfully asked to notify those members of your society who are entitled to *THE JOURNAL* to write direct to the editor if for any reason it is not received or if any numbers are missing. Duplicate copies will be supplied if requests for the same are sent in promptly. Any physician who is entitled to *THE JOURNAL* and does not receive it has no one to blame but himself if he fails to notify the editor concerning the matter.

THE supreme court of the state of Colorado holds that the State Board of Medical Registration and Examination has no constitutional right to revoke the license of a physician for advertis-

ing, and that it has no constitutional right to revoke the license of a physician for accepting money for the cure of manifestly incurable diseases. This is a splendid decision for the quack doctors who ought to find in Colorado a haven of rest and fortune.

IF anyone doubts the value of typhoid vaccination he should read the article on Anti-Typhoid Vaccination in the Army, by Frederick F. Russell, in *The Journal of the A. M. A.*, May 2, 1914. The article concludes with the statement that prophylactic vaccine, as used in the army, has given almost absolute protection against typhoid fever, without producing untoward effects of any character, and showing definitely that the vaccination is both efficient and harmless.

THIS year's session of the A. M. A. will be held at Atlantic City, June 22 to 26, inclusive. The date is a little later than usual, but it permits many to attend the session and then go directly to London for the meeting of the Congress of Surgeons. It is also convenient for those who start on their vacations on or about July 1. Those who are familiar with Atlantic City as a meeting-place know that no better place could be selected, as the hotel accommodations are ample to care for all and to meet the requirements of any purse.

WE are reminded that Massachusetts is the home of the Christian Scientists as also the stamping ground of a number of cults which are opposed to scientific medicine when we hear that the Massachusetts State Senate has passed an anti-vaccination bill which provides as a condition precedent to admission to public schools that children shall not be required to submit to vaccination except at the time of a threatened or real outbreak of small pox, when the school board shall temporarily bar such persons from the schools.

THE JOURNAL has started a Hospital and Sanitarium Directory and we believe that it would be a good thing to have every private and public hospital and every private and public sanitarium listed. Oftentimes doctors desire to refer patients for hospital and sanitarium care in a certain locality and are unable to obtain information as to the existence of institutions without considerable difficulty. A Sanitarium and Hospital Directory would not only solve the problem, but would be of direct benefit to institutions that are included in the list.

"LET THERE BE LIGHT."—The use of electricity has become of such general utility that it is adaptable to the physician's office for a night sign. In this respect it cannot be said to be unprofessional, as the plain intent is not to advertise, but to indicate in an emergency, where the physician may be found. Often, especially on a dark or stormy night, the day sign cannot be seen and the party in need of a physician's services has difficulty in locating the doctor. A modest electric sign, with the name of the physician visible from the street, can be very inexpensively operated and is of material service to one who has been asked to "get a doctor quick."

THE official bulletin of the Chicago Medical Society very justly complains of the unethical conduct of some of the Chicago laboratories that send out letters and literature not only to the profession but to the public in a very evident intention to exploit the people by needlessly arousing their fear of kidney trouble and then playing upon that fear to extract dollars for laboratory examinations. Such commercialism deserves censure, and we hope that the Committee on Ethics of the Chicago Medical Society will demand an explanation of those who are guilty.

IN numerous localities the health authorities are having a great deal of trouble with the plan of enforcing vaccination. We are beginning to believe that it is the height of folly to try to bring about compulsory vaccination. If we say to the public "if you don't want small-pox, get vaccinated," then we have done our duty. Sensible people will take the advice of the medical profession and protect themselves by repeated vaccinations, especially when small-pox is prevalent. Those who are too ignorant or too bigoted to take advice deserve all that they get when they refuse to abide by the advice of scientific men.

IN writing our advertisers, be sure and mention the fact that you saw their advertising in *THE JOURNAL*, and when doing so do not forget to include any key number that may be used by the advertiser. For instance, the Smith Typewriter Company has an advertisement in this number which is intended for the purpose of learning how many doctors are interested in typewriters, and a key number is used. Unless the doctors who answer this advertisement are particular to use the key number, or whatever is designated, the advertiser will not know where the advertisement was seen, and *THE JOURNAL* may not receive credit for the inquiry. The

same is true of other advertising and we especially emphasize the importance of mentioning *THE JOURNAL* when writing advertisers.

EVERY now and then doctors are flooded with samples of mineral waters and literature giving suggestions as to therapeutic uses. We desire to remind our readers that the American Medical Association has given particular attention to the investigation of the merits of various mineral waters and the claims put forth for them, and it has been found that there are few mineral waters that actually come up to the claims made for them, and some of the so-called natural mineral waters are not natural at all but are manufactured. When it comes down to the manufacture of mineral waters, the doctor can do his own manufacturing and save himself or his patients the fancy prices that some of the firms charge.

THE State Board of Health of Kentucky issues a bulletin which has all of the features of a medical journal, though the articles are devoted to preventive rather than curative medicine. We note that a plea is made for the whole-time county health officer, and Dr. J. N. Hurty, secretary of the Indiana State Board of Health, contributes an article on this subject, as well as a splendid article on rural hygiene. It is very evident that the plan to have whole-time health officers is going to grow in popularity and eventually every state in the Union will select its health officers with due regard to fitness for the position and then demand of them their whole time at a salary that is in keeping with the time and services rendered.

THE *Lancet Clinic* has an editorial very properly condemning the practice of packing the nasal cavity after a turbinectomy, and offers some logical reasons why the custom should be abandoned. When the operation has been a clean one, when no shreds or tags with only partly divided vessels have been left behind, the customary packing of the nasal chamber with gauze is unnecessary and cruel. Inspiration through the nose and expiration through the mouth favors the formation of clots in the mouths of the divided vessels, and air is one of our most efficient hemostats. Packing is therefore an unnecessary precaution against hemorrhage, it causes an unnecessary infliction of pain upon the patient, it increases the danger of sepsis in a region communicating with the meninges, as it also increases the danger of secondary hemorrhage.

ONE of the Indiana judges has decided that an osteopath comes within the terms of the law as a doctor, and as such has the right to fit glasses the same as any other doctor. The case arose as a result of a supposed violation of the optometry law. In the comments on the outcome of the case it is said that the optometrists propose to go before the next session of the legislature and have a law passed in which provision will be made for barring all doctors from the fitting of glasses unless they secure a license from the optometry board. The presumption with which optometrists assume to possess all the knowledge necessary for the prescribing of glasses is astounding. While we have no sympathy for the medical men who possess no theoretical or practical knowledge concerning the fitting of glasses, yet we venture to say that the majority of them know more about the subject than the average optometrist.

A PENNSYLVANIA court has declared that a person guilty of wanton cruel torture of an animal shall be guilty of a crime, even though the treatment be done for scientific purposes. The jury is then given to understand that operations performed upon dogs, even though done under the effects of an anesthetic, constitutes cruelty to animals and a person performing such operation shall be guilty of crime. If all courts are of the same opinion, and the opinion is sustained by juries, then we might as well say good-bye to practically all of the scientific progress that we are now making as a direct result of animal experimentation. The one satisfaction we have is that in all probability there will be some localities where animal experimentation done under humane regulations will be permitted under the law, and there our investigators will find a haven of refuge.

OUR readers may be tired of our incessant requests to patronize our advertisers, but it is a case of necessity with us to show that advertising pays or we cannot continue to hold the advertising patronage, and without the advertising patronage *THE JOURNAL* goes out of business. There is not anything advertised in *THE JOURNAL* but that does not appeal to members of the medical profession, and there is absolutely no reason why our readers should not patronize the advertisers rather than those who do not advertise with us. Furthermore, it is a simple thing to say "I saw the advertising in *THE JOURNAL*." Don't forget that reciprocity is the life of trade of every kind, and when advertisers

help us to give you a better journal there is no reason why you should not return the favor by giving them your patronage.

THE use of radium in the treatment of malignant growths is worthy of serious consideration, and yet it is well for us to guard against undue enthusiasm, for there seems to be a well defined opinion among those who have watched the progress of radium therapy that the proper treatment of malignant disease which is operable is by operation. The neoplasms which respond best to the radium treatment are sarcomata, but some good results have followed radium treatment of certain forms of carcinoma, particularly carcinoma of the bladder. All who have had any experience with radium therapy are united in saying that there is much to be learned and the greatest caution should be observed in reporting the results and especially the making of statements which may in any way be distorted by the lay press which often creates incalculable harm among sufferers by giving unwarranted credit to procedures that are quite questionable in their results. We have yet to learn the limitations in the use of radium as a therapeutic agent, and it is well for us to be extremely cautious in our statements as to the results secured.

ONE of the captains in the regular army, writing from the Mexican border to an Indiana friend, recounts his experiences in establishing camps in unhealthful and unsanitary locations. The work of the army engineers soon makes things sanitary and they are kept so by rigid regulations which every soldier is compelled to follow. But the interesting feature of the letter is the following: "The first year the division was in camp there were but two deaths from natural causes. The average number of men in camp was about thirteen or fourteen thousand, and not a single case of typhoid fever. Of course all the men were given the typhoid prophylactic treatment. This seems to me to take the wind out of the sails of some of the wiseacres who claim the treatment is all bosh." Those who are opposed to serums and vaccines should examine the records of the army and learn what has been accomplished by typhoid vaccination. Like it is with vaccination for small-pox and many other preventive measures, there will be cranks and fanatics who oppose typhoid vaccination, but there is an old saying that "the proof of the pudding is in the pulling of the string," and army officers are going to continue a practice that unquestionably has demonstrated its value and efficiency.

THE progress of medical science, and particularly in the field of preventive medicine, never receives any consideration at the hands of *Life*, which continues by cartoon and editorial comment to condemn the medical profession for vivisection, vaccination, and practically everything else which belongs to scientific medicine. Fortunately there are some lay periodicals which do not approve of *Life's* course, and among them is the *Boston Herald*, which comments on *Life's* accusations as follows: "Is there anything more cowardly than lying insinuations against a set of men and women who devote their lives, and often sacrifice them, to alleviate suffering? Is there anything more contemptible than the back-hand thrust of generality to conceal the falsity of what admits of no proof? Is there anything more unworthy of a paper that lays claim to being a force for good than to sow seeds of malicious untruth? No law prevents this form of slander. There is no punishment for this meanest of journalistic crimes."

SOME of us may not have been in entire sympathy with the administration in the conduct of negotiations with Mexico, but after the necessity arose for sending our war vessels and troops to Mexico we believe that the best way to settle our difficulties with Mexico now and for some time to come would be by giving the Mexicans a good thrashing. For a great many years Mexico has had no respect for the American flag or American citizens, and the outrages and indignities that have been heaped on us by the treacherous Mexicans have been often and many. To withdraw from Mexico after once getting a foothold there will be construed by the bulk of the Mexicans as being an evidence of cowardice, and, if we mistake not, the American flag and American citizens will be shown less consideration than ever before. Peace is all right in its place, and we have exhibited an unusual amount of patience in an attempt to avoid war or warlike demonstrations, but there comes a time when patience ceases to be a virtue and war is a necessity in order to preserve proper respect for our nation and its people.

PHYSICIANS will be interested in the statement of Shalet (*Jour. the A. M. A.*, April 11) in the discussion of the tuberculin treatment when he says: "There is good authority for saying that the clinically cured under tuberculin treatment are less likely to relapse than those receiving sanitarium treatment alone. The theory upon which this statement is based is that the tuber-

culin establishes an immunity which protects the individual. While the number of distinctly improved and apparently cured under sanitarium care and tuberculin does not appear to be any greater than under sanitarium care alone, the value of the former is in bringing up to the same percentage a type of case that under sanitarium care only would by no means fare so well if clinical experience is worth anything." Shalet concludes that as there is no way of telling beforehand what case of pulmonary tuberculosis will benefit most on tuberculin, every patient with that disease should be treated with tuberculin and only those ruled out who seem unsuitable by reason of their hyper-sensitiveness as proved after injection, but even these may receive all the benefits that tuberculin has to offer if it is given in small enough doses and very slowly increased.

THE chiropractors are waxing fat in Indiana. They are not required to secure any permit of any kind whatsoever, and for that matter they are not required to know anything in order to administer to the sick and suffering providing no drugs are prescribed. Then there are the mechano-therapists, naturo-therapists, and a number of other pseudo-medical cults that are making a bid for the shekels of all those unfortunate ones who are willing to bite at any kind of bait. This idea of treating all kinds of diseases without drugs and without the necessity of acquiring any qualifications is getting to be a great graft. All that is necessary is for some glib tongued chap to coin a new name for the particular profession he is supposed to represent, open an office, advertise liberally in the newspapers, and the trick is turned. In the meantime regular doctors are required to have two years of college work and four years of medical training, and pass an examination given by the Board of Medical Registration and Examination before he is permitted to practice. It doesn't make any difference whether he is going to use drugs or not, he is the "goat" just the same.

THE so-called Bureau of Cooperation is wasting its time and efforts in sending us stereotyped articles opposing prohibition in every form. We are perfectly willing to admit that there is a certain amount of hysteria and ill-timed effort put forth to stamp out the liquor traffic, but we are not willing to admit that the general principle of prohibition should not be supported by every right-thinking individual. All over this broad country there is a growing feeling that the liquor traffic should be controlled, and it is rather

remarkable to note that the success that has been attained in accomplishing the desired results has not been brought about through the prohibition party per se, but through action on the part of the public, irrespective of politics, and the sentiment is bound to grow until some day there will be prohibition in every state in the Union. We confess that we have never done very much towards helping the temperance cause but it is a "cinch" that we are not going to give the distillers or brewers either sympathy or support in their efforts to keep their business alive. Alcoholic beverages may serve some useful purpose in the world, but the harm that they do outweighs the good a thousand to one, and for that reason we are willing to throw our sympathies with the temperance movement when it is conducted along sane and efficient channels.

IN this number of *THE JOURNAL* we print a communication from the State Board of Medical Registration and Examination in which attention is called to the fact that some effort must be put forth to preserve our present medical law and prevent its practical nullification by the admission of various pseudo-medical cults to the practice of medicine within this state without the formality of registration. It is well known that medical pretenders of every type have been practicing within this state without let or hindrance, and the few prosecutions and fewer convictions that have been brought about have done little to keep the pretenders out. No doubt an effort will be made to lower the standard fixed by our medical law but not upheld, and in particular to admit various drugless healing cults to the practice of medicine upon terms which will be short of no regulations of any kind whatsoever. But, if the medical profession can establish the fact that attempts to treat or relieve diseased persons constitutes the practice of medicine within the full meaning of the law, then and then only can we ask for a perpetuation of all the present requirements for the practice of medicine within the confines of the state. The proposition as placed before the readers of *THE JOURNAL* by the secretary of the State Board of Medical Registration and Examination is worthy of serious consideration.

DETAIL men from two different pharmaceutical houses are now calling upon Indiana physicians in an attempt to introduce serums and vaccines. One of these detail men represents a line of products that have not received the approval of the Council on Pharmacy and Chemistry of the A. M. A., and the other represents a line that

has been partly approved. Neither of the firms represented by the detail men are advertising in *THE JOURNAL*, and one of the firms has very bluntly written us to the effect that they do not advertise in state journals. We wish to remind our readers that three or four very reputable and responsible firms that advertise in *THE JOURNAL* are manufacturing biologic products that have received the approval of the Council on Pharmacy and Chemistry, and there is absolutely no reason why our readers should not patronize these firms. We are not giving the names of the firms that think they can get business without advertising, but we are respectfully asking that our readers shall patronize those who are advertising with us, and we hope that the request will receive favorable consideration. We believe in reciprocity. The advertisers in *THE JOURNAL* are worthy of support and we hope that they will receive patronage to the exclusion of firms that are not willing to have their products approved nor inclined to advertise in journals that are owned by the medical profession.

"WHAT FOOLS THESE MORTALS BE!"—Attention is called to the picture on the opposite page. It is not a funny picture. It is not intended to be. Look at it carefully and then come back to this. Rabbits, mice and guinea-pigs are the animals most commonly used by science in wrestling with the problem of cure for dire disease. We repeat the caption of the picture opposite: "Measured in rabbits, mice or guinea-pigs, how much is the life of your mother or sister worth?" Anti-vivisectionists, if they are consistent, would answer promptly and positively. Better lose a thousand human lives than sacrifice a single rabbit, mouse or guinea-pig in the experimental laboratory. That is what anti-vivisection means, if it means anything.

Now, as to another side of the question: To die in order that others may live is the highest type of service. True religion is founded on that principle or teaching. Mankind prizes the privilege, as countless acts of unselfish heroism amply attest, but man's opportunity for service in this respect, in the saving of lives, is small compared with that of the humblest rabbit, mouse or guinea-pig. An engineer sticks to his cab and brings a trainload of fellow humans safely through a forest fire. A tiny animal in the hands of modern medical scientists may any day, any hour, any minute, be the means of saving ultimately thousands of human lives which now are a sacrifice to ignorance or imperfect knowledge.

That which is termed vivisection will not be stopped unless progress itself be stopped. Science requires live organs on which to experiment; organs in which life is extinct are useless in the experimental laboratory. If a sufficient number of Antis will offer their living bodies to the cause of science and humanity, the rabbits, mice and the guinea-pigs may be spared, but there is no alternative, no other way. And why not? What could be more lasting than the fame of one of whom it might be truly said: "By the gift of his living body he rescued the world from

hibits physicians, dentists and veterinarians from dispensing or distributing narcotic drugs to patients, and it prevents physicians from sending by messenger or otherwise remedies for immediate relief when unable to personally attend patients upon the instant. It also prevents a physician from directing a nurse to administer an opiate to a patient in the absence of the physician, or in any way attempting to relieve suffering without personal attendance. Such restrictions upon the efficiency of physicians tend to lessen their usefulness to the people, and the



TO THE ANTI-VIVISECTIONIST
 "AT HOW MANY RABBITS OR GUINEA PIGS DO YOU VALUE
 YOUR WIFE, YOUR HUSBAND OR YOUR CHILD?"

cancer." Such a man, in point of service, would be raised to the level of the rabbit, the mouse and the guinea-pig.—*Puck*, April 18, 1914.

THE cat is out of the bag. Senator Knute Nelson, who offered the objectionable amendment to the Harrison Anti-Narcotic bill says, in a recent letter, "I desire to say that I offered this amendment at the request of Mr. C. H. Huhn of Minneapolis, *Secretary of the Minnesota Retail Druggists' Association*." This shows who is trying to cripple the usefulness of the medical profession and incidentally feather their own nests. The Harrison anti-narcotic bill as passed by the House was a good bill and entirely satisfactory to the medical profession. The amendment offered by Senator Nelson practically pro-

hibition is evidently offered purely in the interest of the dispensing druggist to the detriment of good medical service to the people. The Nelson amendment should be defeated in the interest of the public welfare, and every physician in the country should register his objection with his representatives in the Senate and House of Congress.

IN the light of subsequent investigation it would seem that the deaths from neosalvarsan injections at Los Angeles were due not alone to faulty technic in the administration of the remedy, but to a flagrant violation of the ethics of decent pharmacy by the purchase, through bids on the part of the county, of a contraband product bearing no guarantee, but sold as being

"just as good," though cheaper. As has been stated by one of our exchanges, "The great county of Los Angeles saved a few cents by purchasing a questionable article from a peddler, and seven lives were sacrificed." Fortunately the grand jury called to investigate the seven deaths following the administration of neosalvarsan, concludes its report as follows: "The use of neosalvarsan or salvarsan should not be discontinued on account of these fatalities, as the unanimous opinion of all the experts who testified before our body was that this remedy is one of the greatest discoveries of the twentieth century. We recommend that the proper federal authorities be requested to exercise more stringent supervision over the importation of the remedy in order that contraband goods may be absolutely prohibited, to insure fresh and genuine supplies at all times, also that every effort be made to overcome the evil effect arising from this most unfortunate occurrence that society may not lose this great boon because something went wrong." The report is a fair, unbiased conclusion, based upon their investigation of all the facts pertaining to the unfortunate experience, and in which seven lives were lost, apparently as a direct result of neosalvarsan injections.

"THE State Board of Health of Michigan has discovered that an osteopath in the city of Belding is treating a case of small-pox. Although this is a violation of the law, the Board of Health says that it has no jurisdiction over such cases, and the matter has been referred to the State Board of Registration and Examination."—*Lancet Clinic*. In all probability the State Board of Medical Registration and Examination will say that it is not acting as prosecutor, and the matter will be referred to the prosecuting attorney of the county in which the infraction of the law has occurred. The prosecuting attorney will await the action of someone who is willing to file an affidavit, and some representative doctor will be expected to get busy. If the doctor is led to file the affidavit, the people of the county, especially the patrons of the osteopath, and in all probability the newspapers of the community, will cry out that it is a case of "sour grapes," and that the osteopath is being persecuted rather than prosecuted. In such manner do the wheels of justice go around where it concerns the enforcement of a medical practice act.

This idea of asking reputable medical men or some medical society to prefer charges against a person who is presumably illegally practicing medicine, is on a par with a demand that saloon

keepers shall file affidavits against other saloon keepers who are breaking the law in selling liquor without a license. If we waited for the saloon keepers to file affidavits against those of their number who are trafficking in liquor without license to do so, we would never have any prosecutions. For the benefit of our readers we desire to quote from the Medical Practice Law of Indiana as amended in 1899, 1901 and 1905. "The State Board of Medical Registration and Examination is charged with the duty of enforcing this act, and it shall be the duty of the prosecuting attorney on the complaint of the Board to prosecute any violation of this act." According to this it will be understood that it is not necessary for a physician or a county medical society to act as complainant in any case of the violation of the medical practice Act of Indiana.

DEATHS

JAMES A. HARRISON, M.D., of Spurgeon, died April 7, aged 62 years.

HARVEY H. CHASE, M.D., died at Shelbyville, Ind., March 29, aged 65 years.

CHARLES L. REA, M.D., died at his home in Falmouth, April 7, aged 55 years.

MARY S. HOPKINS, widow of the late Dr. Joseph Hopkins, of Princeton, died April 14.

WILLIAM R. NASH, M.D., formerly of Brownsburg, Ind., died at Fairmount, Ill., recently, aged 72 years.

MRS. DORA SEAL, wife of Dr. Frank E. Seal, died suddenly of heart trouble, April 22, at her home in Brookville, aged 48.

VERE CHAPPEL, M.D., of Knightstown, died at St. Vincent's Hospital, Indianapolis, April 24, following an operation for cancer.

SYLVIA PEARL GARNER, M.D., died at her home in Indianapolis, March 30, death being due to pulmonary trouble. She was a graduate of the Indiana University School of Medicine.

SAMUEL B. THOMAS, M.D., aged 82 years, died April 7 at his home in Milroy. Dr. Thomas has practiced medicine in and around Milroy for fifty-five years. Paralysis was the cause of his death.

REBECCA ROGERS GEORGE, M.D., died April 17 at her home in Indianapolis. Dr. George was a graduate of the medical department of the University of Michigan, and was associated in the practice of medicine with her husband, Dr. William F. George.

J. Y. HITT, M.D., died at his apartments in the Annex Hotel, Greensburg, April 14, aged 82 years. Dr. Hitt received his early education from private tutors, Funck's Seminary, Low Pressure Academy, at Oldenham, and graduated in medicine from the University of Louisville in 1853, soon after which he located at Greensburg, where he continued the practice of medicine until a few years ago, when declining health compelled him to give up his work.

I. G. SIMS, M.D., of Portland, died April 30, following a stroke of paralysis which occurred April 26, never having regained consciousness. Dr. Sims was born in Licking County, Ohio, January 27, 1847, attended the Liber College, Ridgeville College, and graduated in medicine from Miami Medical College, Cincinnati, in 1874. He was a member of the Jay County Medical Society and the Indiana State Medical Association.

NEWS NOTES AND PERSONALS

INDIANAPOLIS

DR. HUGO PANTZER has returned from Florida where he went for recuperation after a tonsillectomy.

DR. JOHN CUNNINGHAM and wife have been on a short pleasure trip to Oklahoma, spending a few days with Dr. Samuel Cunningham, formerly of Indianapolis.

DR. MOSES THORNER and family have gone to Los Angeles, Cal., for permanent residence. Dr. Thorner's place as a member of the city board of health has not yet been filled.

THE City Board of Health held the annual examination for internships at the City Hospital at the office of the board in the City Hall, April 23 and 24. Fifteen took the examination for the ten or twelve places open. Seven senior students also took an examination for appointments at the City Hospital, Cincinnati.

AN original research seminar was held at the Medical College Building, Friday evening, April

24, at 8 o'clock. There was a large attendance of the faculty, and a paper was read by Dr. Meyers and addresses given by Drs. Moenkhouse and May. The paper and addresses dealt with research work done by these gentlemen at the university. It is the intention to hold these seminars regularly, whereby an opportunity will be afforded the teaching force of the Medical Department of the University to present and discuss any work of this character undertaken. It would be difficult to exaggerate the significance of this seminar in its relation to medical teaching, as it tends to place the emphasis where it belongs, that is on the disposition and ability to do work.

GENERAL

DR. HENRY W. BOPP, formerly of Palmyra, has located at Terre Haute.

DR. AND MRS. T. J. NORTON have returned to Alert, Ind., after a six months' stay in California.

DR. AND MRS. STEPHEN J. YOUNG, of Terre Haute, observed the fiftieth anniversary of their wedding on April 19.

THE contract for the St. Joseph County Tuberculosis Sanatorium, to be constructed at South Bend, was let March 30 for \$7,725.

THE American Proctologic Society will hold its sixteenth annual meeting at Atlantic City, N. J., June 22 and 23, at the Hotel Chalfonte.

THE twelfth semi-annual convention of the Indiana State Nurses' Association was held at Evansville, April 20 to 22.

DR. JOHN W. BELL has sold his practice at St. Paul, Ind., to Dr. W. R. Turner, of Madison, and will locate in Dayton, O.

DR. J. H. LAKE, formerly of St. Joe, has located at Branch, Mich., where he will continue the practice of medicine.

DR. T. C. DODDS, of Hartford City, has recently received his commission as surgeon in the medical corps of the United States Army.

DR. GEORGE BAKER, of Odell, was quite seriously injured on April 26 when his automobile turned turtle, crushing him beneath it.

DR. FRANK A. MAY, of Hardinsburg, has sold his practice at that place to Dr. Benz, of Louisville, and will locate at La Fayette, Ind.

DR. J. E. FERRELL, formerly of Greenfield, has located at Fortville, and after three months postgraduate work will take up his practice at that place.

DR. GEORGE B. LAKE, formerly of Woleottville, but now in the Army Medical Service in the Philippines, has recently been promoted to a captaincy.

DR. M. M. CLAPPER, of Hartford City, who has been in New York City for some time taking a postgraduate course, sailed May 2 for Vienna for further study.

DR. W. B. McDONALD, of New Augusta, has been quite seriously ill with complications arising from blood poisoning brought on through an injury to his foot.

THE fourteenth annual commencement of the Hope Hospital School of Nursing, Fort Wayne, was held at the high school auditorium May 1. Seven nurses received diplomas.

THE commencement exercises of the Lutheran Hospital Training School for Nurses, Fort Wayne, was held May 4, seventeen nurses graduating in their chosen profession.

DR. WM. S. POWELL, formerly of Ladoga, Ind., was instantly killed at Calamus, Ia., April 14, when a heavy locomotive struck the automobile he was driving and totally demolished it.

DR. HARRY F. METTS, of Bluffton, has returned from a fifteen days' visit in Cleveland, Ohio, and Sarnia, Can. His family, who accompanied him, will remain for several weeks.

THE third International Child Welfare Convention is to be held in Washington, D. C., May 22-27 under the auspices of the National Congress of Mothers and the Parent-Teacher Association.

DR. ROBERT W. LONG, of Indianapolis, who gave the Robert W. Long Hospital to Indiana University School of Medicine, has recently given an additional \$10,000 for extra equipment for the hospital.

DR. CARL H. EIGEMANN, dean of the Graduate School and head of the Biology Department of the University of Bloomington, is in the Methodist Hospital at Indianapolis undergoing treatment for his eyes.

DR. F. J. SPILMAN, of Connersville, has returned from Arizona where he, with his wife and daughter, went some months ago in the interest of their daughter's health. The daughter's condition is much improved.

SEVENTY-FIVE European surgeons, who were in attendance at the International Surgical Congress in New York City, are making a tour of the United States, including eastern cities and Chicago and Rochester, Minn.

IN the prosecution of chiropractors, Earl Garren was found guilty at Crawfordsville, and Ben Cracklas was found guilty at Gary. O. D. Brownell, of Warsaw, practically won his case through disagreement of the jury.

THE Fort Wayne Anti-Tuberculosis League has established a dispensary in the Schmidt Block, with Drs. Erie A. Crull, Edmund M. Van Buskirk and Charles G. Beall staff physicians. Miss Irene Byron, visiting nurse, has charge of the dispensary.

THE Evansville Sanitarium has been incorporated and will hereafter be known as the Walker Hospital. During the present year an addition will be built and when completed the institution will take all cases excepting mental and contagious diseases.

THE Pitman Myers Company, pharmaceutical chemists, of Indianapolis, has changed its firm name to Pitman-Moore Company. Harry Moore, whose name now becomes a part of the corporate name, has been president of the company and has had the general management of the business for several years.

DR. W. F. BATMAN, of Ladoga, Ind., is Democratic candidate for county auditor of Montgomery County. Dr. Batman has always contended that doctors do not have enough "say" in public affairs, and if elected next fall he will retire from the practice of medicine after thirty-seven years of constant work.

JOSEPH D. BRYANT, M.D., well-known surgeon, nestor of the faculty of the Bellevue Hospital Medical College, president of the American Medical Association in 1907 and 1908, and surgeon-general of the National Guard, State of New York, from 1882 to 1894, died at St. Vincent's Hospital, New York City, April 7, from diabetes, aged 69 years.

Dr. Joseph Rilus Eastman, of Indianapolis, will read a paper in the symposium on Cleft Palate at the Clinical Congress of Surgeons in London in July. Other participants in the symposium are Sir Arbuthnot Lane; G. V. I. Brown, of Milwaukee; Percy Legge, of King's College Hospital; Johan Ulrich, of Copenhagen; Judd, of Rochester, Minn.; Brophy, of Chicago, and Professor Keith, of the Royal College of Surgeons.

THE grand jury has filed the report of the investigation into the deaths of the eight patients in the Los Angeles County Hospital alleged to have been due to the administration of neosalvarsan, placing no responsibility on the staff of the hospital, but recommending that the federal authorities be requested to exercise more stringent supervision of the importation of the remedy in order that the fresh supply may be available at all times.

THE last issue of the Bulletin of the St. Joseph County Medical Society recites the history of the formation of their new clinical laboratory. It is established by twenty-three physicians, each taking stock to the value of \$100. Since July, 1912, when the laboratory was opened, it has proven a success, and they have recently made a contract with the City of South Bend whereby the laboratory agrees to examine specimens of water, milk and food and to make throat cultures for the Board of Health of that city.

AT the annual meeting of the American Surgical Association, held in New York City, April 8-11, the following officers were elected: president, Dr. George E. Armstrong, Montreal; vice-presidents, Drs. Lewis S. Pilcher, Brooklyn, and Frank E. Bunts, Cleveland; secretary, Dr. Robert G. Le Conte, Philadelphia; treasurer, Dr. Charles L. Gibson, New York City; recorder, Dr. Archibald McLaren, St. Paul; councilors, Drs. Wm. J. Mayo, Rochester, Minn.; Arpad G. Gerster, New York City, and Charles A. Powers, Denver. The next meeting will be held at Rochester, Minn.

THE ninety-first semi-annual meeting of the Union District Medical Association was held at Hamilton, Ohio, April 23, 1914, with David W. Stevenson, Richmond, presiding. The following was the program: "Serum Therapy," Dr. E. R. Beard; "Some Past Medical History," Dr. L. D. Dillman, Connersville; "Studies of Colon Stasis," Dr. J. R. Eastman, Indianapolis; "Tubercular Meningitis," Dr. H. F. Lorimer, Oxford; "Appendicitis," Dr. D. D. Deneen, Cin-

cinnati; "The Medical Examination of the School Children of Richmond," A. L. Bramkamp, Richmond.

DR. WILLIAM N. WISHARD, of Indianapolis, celebrated the fortieth anniversary of his graduation in medicine Feb. 28, 1914, by giving a dinner at the Columbia Club to all those who had been interns during the seven and a half years that he was superintendent of the Indianapolis City Hospital, those who had been his office-mates since he began the practice of medicine in Indianapolis, and those who had been his assistants in various capacities in his office work. The evening was spent in giving personal histories, reminiscences of hospital days, and the dealings of time to the present. Dr. Wishard is recognized as one of the eminent hospital superintendents and builders of the United States, as well as a leader in his profession, and in appreciation of his friendship and their regard for Dr. Wishard, Dr. J. H. Oliver, in behalf of the guests, presented him with a beautiful loving-cup, fittingly inscribed.

Since publication of New and Nonofficial Remedies, 1914, the following articles have been accepted for inclusion with "N. N. R." Those accepted during the current month are made prominent by the use of capitals:

H. M. Alexander & Co.:

NORMAL HORSE SERUM; Typhoid Vaccine, Immunizing.

Antiseptic Supply Co.:

CAUSTICKS; CAUSTICK APPLICATIONS; CUPRICSTICKS; STYPSTICKS.

B. B. Culture Laboratory:

B. B. Culture.

Farbwerke Hoechst Co.:

Amphotropin; EREPTON.

Fairchild Bros. & Foster:

Trypsin.

Hoffmann-LaRoche Chemical Works:

Thiocol; Syrup Thiocol, Roche; THIOCOL TABLETS.

Hynson, Westcott & Co.:

Phenolsulphonephthalein, H. W. & Co.; Phenolsulphonephthalein Ampules, H. W. & Co.

Merck & Co.:

Cerolin.

H. K. Mulford Co.:

ACNE SEROBACTERIN; Anti-Anthrax Serum, Mulford; Antistreptococcus Serum Scarlatina, Mulford; COLI SEROBACTERIN; Disinfectant Krelon, Mulford;

NEISSER SEROBACTERIN; PNEUMO
SEROBACTERIN; Salicylos; SCARLA-
TINA STREPTO SEROBACTERIN;
Staphylo - Serobacterin; STAPHYLO
ACNE SEROBACTERIN; Strepto-Sero-
bacterin; Typho-Serobacterin.

Riedel & Co.:

NEW BORNHYVAL.

Reinschild Chemical Co.:

PHENOLPHTHALEIN AGAR.

E. R. Squibb & Sons:

SODIUM BIPHOSPHATE, SQUIBB; Tet-
anus Antitoxin, Squibb.

Aseptic Chemical Co.:

Freemann's Russian Mineral Oil: Having been
found to comply in all respects with the
requirements of the U. S. Pharmacopeia for
liquid petrolatum and not being in conflict
with the rules, the Council held Freemann's
Russian Mineral Oil and official article not
requiring admission to New and Nonofficial
Remedies.

OFFICE HOURS SHOULD BE GIVEN IN THE PHYSICIANS' DIRECTORY.

GREENFIELD, IND., April 2, 1914.

To the Editor:—One of the greatest disap-
pointments in your JOURNAL, as in most others,
is to turn to the Professional Directory and find
the cards not indicating the office hours nor tele-
phone numbers of the physicians.

Recently we took a patient to Indianapolis to
consult one of our professional friends and found
on arrival that it was three hours before his
regular office hours and that he would not be in
before. Another friend received the fee for serv-
ices, which included a minor operation. Before
going we looked in the Physician's Directory in
THE JOURNAL to ascertain the office hours of the
physician, but alas, found them not given.

For the benefit of we who live in the "field,"
insist that physicians give the office hours in their
cards. We are the ones who use the Directory,
and they the ones who lose by not having hours
indicated.

Fraternally,

JOSEPH L. ALLEN, M.D.

CORRESPONDENCE

BOVINE TUBERCULOSIS AT MUNCIE MUNCIE, IND., April 10, 1914.

To the Editor:—The City Board of Health,
assisted by State Inspector Hutchins, is making
a crusade on the dairies here. Out of fifty
dairies we found only ten that were absolutely
good; we expect to have twenty come in line;
and we condemned twelve. We are going to see
that Muncie gets pure milk, and cattle that are
free from tuberculosis.

Respectfully,

N. D. BERRY, M.D., Sec.

A CORRECTION

LA FAYETTE, IND., April 28, 1914.

To the Editor:—Either the stenographer, the
printer, or I made a mistake, as recorded on page
160 of the current number of THE JOURNAL of
the Indiana State Medical Association. The
words "one-twelfth" should be "twelve one-
hundredths." As we have no lenses in our trial
case so weak as one-twelfth of a diopter we can-
not correct this, but modern cases do contain
lenses .12 D.

Please make correction for me. With many
thanks, I remain,

Very fraternally,

GEORGE F. KEIPER.

MEDICOLEGAL BUREAU

Editor The Journal:—The Council on Health
and Public Instruction of the American Medical
Association has established a medicolegal bureau
for the purpose of collecting, arranging and
studying all of the available material bearing
on medicolegal questions of interest to physi-
cians or relating to public health matters. This
bureau is in charge of Mr. John D. Hubbard, a
graduate of the Northwestern University School
of Law. We desire to secure all available mater-
ial bearing on medicolegal subjects, especially
all pamphlets, bulletins, monographs, circulars,
legislative bills, laws, reports or special articles
on any medicolegal or public health topics. As
rapidly as material can be secured and studied,
we hope to furnish information to all those inter-
ested on any topic coming within the range of
the bureau. We shall greatly appreciate it if
you will kindly send us, at any time, any such
material that may come into your hands. This
will be properly classified, cataloged and pre-
served for use in answering inquiries on any
medicolegal question. We hope to make this
bureau of service to the officers and members of
state associations, executive officers of state
boards of health and medical examining boards,
and any others interested. Any assistance or
contributions will be appreciated and of great
assistance in carrying out the plans of the bureau.

With cordial thanks for your many courtesies in the past, and hoping that we may, through this bureau, be of some assistance to you in the future, we remain,

Very truly yours,

FREDERICK R. GREEN,

Secretary, Council on Health and
Public Instruction.

THE CHIROPRACTORS

CRAWFORDSVILLE, IND., April 24, 1914.

To the Editor:—Earl Garren, a chiropractor practicing the healing art at Crawfordsville, Ind., was recently indicted by the grand jury and convicted for practicing medicine without a license. The fine assessed was \$75 and costs.

Garren was defended by a man by the name of Morris, who hails from LaCrosse, Wis. Morris is employed by the Chiropractors' Association to defend all members of said association who are arrested for practicing without a license. Williams & Murphy, a firm of local lawyers, assisted Mr. Morris.

The defense claimed that Garren was not practicing medicine, because he did not prescribe or use drugs, but instead "analyzed and adjusted sub-luxated spinal vertebrae" which impinged spinal nerves. The court held that it is the "thing done," and not "the name," that constitutes the practice of medicine within the meaning of the Indiana law. Garren's method of treatment was to "adjust" sub-luxated vertebrae, which, of course, is a surgical procedure; therefore comes within the purview of the law; hence, the verdict seemed just and fair, as any other construction of the law would have had the effect of defeating the real purpose of the legislature.

The Medical Practice Act was passed primarily for the protection of the people by requiring that a minimum standard of educational qualification should be required of all persons who undertake to treat the sick and afflicted, regardless of the system practiced or methods of treatment employed. The law is entirely fair, for it specifically provides that in the administration of the act the administering power "shall not discriminate in favor of or against any system or school of practice"; therefore, all applicants, regardless of school or system practiced, must be admitted to licensure on the established standard of qualification requirements as provided by the statute. If any other course were pursued by the State Board of Medical Examiners, the

board would be open to the charge of discrimination, which the law expressly forbids.

The chiropractors contend that they should be admitted to practice after one year's attendance at a chiropractic college. What would be the result if this were permitted? Would not the magnetic healer, the suggestive therapist, the naturopath, the voodoo and all other of the numberless healing cults be clamoring for special legislation also? If the standard of qualification should be lowered for the chiropractor, then it must be lowered for the magnetic healer and the incanter as well. If not, why not? These cults treat the sick, and all have patients who are willing to make oath that they have received benefit from their treatment.

It may be readily seen from the foregoing, and by every one except the most superficial thinker, that unless a uniform standard of education is maintained the legislature will be charged with discrimination. And if a uniform standard is *not* maintained it will result in the defeat of the very essence of the Medical Practice Act, viz., an established educational standard of qualification, which is the chief purpose of the law.

I have been a member of the State Board of Medical Registration and Examination since the present law was passed in 1897, and I hereby assert that no applicant from any school or system of practice, who has shown by documentary evidence that his or her application has been made in conformity with the educational requirements as provided for by the Indiana statute, has ever been refused admission to the State's qualifying examination test. I am willing to make oath to the above assertion. The door is open for all who can and will comply with the education qualification as fixed by and under the law, and this is fair to those not employing drugs as a method of treatment, for they are not required to take an examination test in materia medica.

The prosecuting attorney at Crawfordsville stated that if the Medical Practice Act is wrong, that the remedy lies in the legislature and not in open violation and disobedience of the law. He also stated that if Garren did not respect the decision of the court here, and obey the law, he would station a policeman at his office door to secure evidence and arrest him for each day that the law is violated.

The Montgomery County prosecutor believes that law should be respected and that it is the duty of officers of the law to see that the law is enforced and not trifled with. The Montgomery County prosecutor's conception of the

duties of his office is commendable, and is worthy of emulation by other county prosecutors. Ignoring or overriding the law is not among the duties of prosecuting attorneys.

The parent school of the chiropractic cult is located at Davenport, Iowa, and is conducted by a man by the name of Palmer. These spinologists have never been given legal recognition in the state of their birth. Palmer's followers have, however, been clamoring for recognition at the door of the Iowa legislature for some years. The general assemblies of many other states (Indiana included) have been lobbied in the interests of this cult.

Since legislation in various states has put the diploma mills out of business, many new drugless healing cults have come into existence, and usually under the guise of the discovery of a new system of healing, but in reality for the purpose of circumventing the laws that have been enacted in the various states requiring that all persons shall successfully pass the educational test of qualification before entering the practice of the healing art.

The chiropractors are now organizing for the purpose of lobbying the next session of the general assembly of Indiana, and will be heard clamoring for the legislature to dignify their cult by passing a law giving it special and exclusive privilege of creating a board that shall be composed entirely of their own faith and kind. If the legislature should accede to these clamorings, it cannot consistently refuse the demands of other healing cults that desire recognition (and on a standard of qualification of their own choosing) without being open to the charge of discrimination in favor of the chiropractor and against others who have complied with the existing educational standard. Other healing cults are sure to demand recognition on a standard of their own choosing. The general assembly cannot consistently refuse them the same consideration.

All citizens of the state who oppose taking a backward step in our educational standards, which we have been nearly a quarter of a century in building, should take an active interest in interviewing and electing men to the next legislature who have a just and proper appreciation of the importance of a uniform standard of educational qualification as a prerequisite for all who undertake to deal with the health and lives of the people of this commonwealth.

All candidates for membership in the legislature who believe that the present educational standards should be broken down in the interest

of some new-born cult, and the state made a dumping-ground for the charlatan and pretender, should be required to stay at home, regardless of the party label they wear.

County and state societies should arrange to have educational committees appointed, of three or more from each county, with instructions to see that the representatives from their particular counties are not misled, but properly informed upon the necessity of maintaining a uniform standard of educational qualification that all persons (regardless of methods employed in the treatment of disease) should be required to successfully pass, before undertaking the treatment and prevention of diseases that affect the health and lives of the people.

No one stands closer to the family than does the family physician, and no class of citizens can wield a wider influence when organized than the family physicians, and it is his plain duty to see to it at once that candidates for election to the legislature understand the importance of maintaining the present medical educational standard, and that they are not deceived by the sinister arguments of those who do not wish to comply with the present educational requirements.

Respectfully,

W. T. GOTT,

Secretary State Board of Medical Registration and Examination.

SOCIETY PROCEEDINGS

THIRTEENTH DISTRICT MEDICAL SOCIETY

The nineteenth semi-annual meeting of the Thirteenth District Medical Society was called to order by Vice-President H. P. Preston of Plymouth, at Plymouth, April 17, 1914, with sixty-one members present.

Minutes of previous meeting read and approved. Treasurer's report read and referred to auditing committee. Pres. T. J. Shackelford of Warsaw took the chair at this time and the following program was carried out:

"Diagnosis and Treatment of Bronchitis," J. W. Eidson, Plymouth. Discussed by Drs. W. H. Thompson, Loring, Mitchell, Montgomery, Lent, Berteling, Stoltz and Hayward.

"When and How to Remove Adenoids and Tonsils," E. J. Lent, South Bend. Discussed by Drs. Hager, Preston, Mitchell, Bitters, McDonald, Baer and Crager.

"Pain in the Abdomen; Differential Diagnosis," C. C. Terry, South Bend. Discussed by Drs. Berteling, Yocum, Huffman, Kuhn, Bitters, Stoltz, Hoover.

Intermission—Lemonade.

After intermission the auditing committee reported favorably on treasurer's report and it was adopted by society.

Winona Lake was selected as the place for holding the Fall meeting.

"Injuries of the Elbow Joint," A. C. McDonald, Warsaw. Discussed by Drs. C. J. Loring and Hayward.

The banquet hour having arrived, Dr. Hoover suggested that his paper be omitted.

Motion carried that Dr. Hoover's paper be placed on program for next meeting.

The members adjourned to the banquet during which time they enjoyed several vocal selections.

The meeting was of special interest from the fact that the members took issue with each other squarely and in an outspoken manner and with a frankness which not only made for more actual expression of the essayists' and discussants' real thoughts, but in addition increased the already large feeling of good-fellowship. C. NORMAN HOWARD, Secretary.

INDIANAPOLIS MEDICAL SOCIETY

Meeting of March 31

Meeting at City Hospital, called to order by President. Reading of minutes dispensed with. Application of Dr. Simon Reisler read for first time and posted for thirty days. Dr. J. P. Worrell of Terre Haute was a visitor. Attendance 102.

Program.—Case Report of Elephantiasis of Scrotum, by Dr. F. R. Charlton.

This case is presented as elephantiasis for want of a more accurate term. Over 70 per cent. of oriental elephantiasis is easily demonstrable as due to the *Filaris sanguinis hominis*. This parasite mechanically blocks the lymph vessels. Any cause producing such a lymphangiectasis may produce clinical elephantiasis, such as we see sporadically in cases that have never been in the tropics. Hektoen and Riesman state that "This condition of the tissues, slight or moderate or occasionally severe, may arise from obstruction of the lymphatics from any cause, such as may occur after repeated attacks of erysipelas, after removal of lymphatic glands or from mechanical pressure of new growths." The present case distinctly dates from an extensive crushing injury. Cases similar to this have been pronounced by the pathologic department of this hospital "keloidal granuloma," "keloidal tuberculoma," etc.: Simple keloid should not be easily confused, but a primary keloid modified by extensive lymph blocking becomes so far as gross clinical appearances are concerned elephantiasis. Surgical removal is the only treatment offering relief, and the results therefrom are surprisingly good.

Case Report.—Spinal Salvarsan. Dr. C. F. Neu, showed cases receiving salvarsan intraspinaly, calling attention to various methods used, some of the dangers that might follow, and the uncertainty of results of this treatment to date.

Case Report.—Aortic Lesions, by Dr. S. E. Earp. Dr. Earp presented three patients for demonstration. The first a case of aortic regurgitation in which all characteristics were pronounced. A skiagraph had been taken for the purpose of getting an accurate diagram on a bi-colored felt pattern. This was placed on body of patient to illustrate the difference between x-ray findings and result of percussion; also to give an idea of the cor bovis. Attention was called to a failure of compensation when imperfection of the coronary vessels caused malnutrition of the myocardium. Cardiac hypertrophy in all its phases and Flint's murmur were discussed. It was also shown

how there might be an absence of the Corrigan pulse due to dilatation of ventricle or other defects. The second case was one of aortic regurgitation with a less pronounced water-hammer pulse but a clear Flint's murmur, and the third case was one of mitral stenosis and mitral regurgitation.

"Demonstration of New Instruments for Removal of Adenoids and Tonsils," by Dr. Lafayette Page.

In removing tonsils by dissection, one of the chief difficulties is obtaining an instrument that will hold the tonsil securely. The forceps shown, designed by me, has proved most satisfactory. The tissues are crowded together between the sets of front and back interlocking teeth in such a way that the tonsil can be held perfectly secure without breaking through tissue until operation of freeing surrounding tissues is complete. A knife designed by me is convenient for dissection. The only cutting done is with the short curved blade, just through attachment of anterior and posterior pillars with the tonsillar capsule; then with handle of knife, which is especially designed, surrounding tissues are pushed back until capsule is completely exposed all around. The snare is then applied and operation completed. A palate retractor for exposing adenoid region in nasopharynx was shown. It enables operator to keep field of operation in view while removing adenoids, and afterward to see the points of hemorrhage and directly apply pressure with a sponge or use an artery clamp. With the field thus exposed, adenoid tissue can be thoroughly removed with the curette or, better still, the different sizes of tonsillar punch forceps. The advantage of this method in thoroughly removing multiple adenoids is obvious.

The use of these instruments was demonstrated by the removal of adenoids and tonsils in two patients.

After refreshments meeting adjourned.

ALFRED HENRY, Secretary.

Meeting of April 7

Meeting at Washington Hotel, called to order by President. Minutes read and approved. Drs. George H. McCaskey and Ernest E. Wishard were elected to membership, the latter associate. Attendance 73.

Program.—Case Report: Postoperative gangrene of abdominal muscles, resulting in erosion of deep epigastric artery, due to colon bacillus infection. Dr. A. S. Jaeger.

Mr. B. T., age 32, pain in right side, nausea, diarrhea, chills for three days. Oral temperature, 99 to 102 F. No bowel movement from February 27 to March 2. Large dose liquid albolene followed by very slight movement. Abdomen distended. Right unilateral rigidity. Dulness most marked in lower right zone. Tenderness, but little pain. Oral temperature 101. Rectal temperature 104 2/5. Diagnosis: Ruptured appendiceal abscess, complicated with obstruction. Operated March 2. Omentum deeply infected and adherent, forming ring around a loop of bowel which was congested but not gangrenous. Omentum released followed by gush of foul pus containing several concretions. Drainage tube inserted and abdomen closed. In a few days unbearable odor ensued from wound. Skin incision opened. Subcutaneous tissue and muscles gangrenous. Progressive sloughing of external oblique and rectum followed. Twelve days following operation erosion of deep epigastric occurred. Pus smears showed streptococci and staphylococci.

Daily blood-count averaged 16,000 polymorphonuclears. Treatment: Normal salt irrigations. March 17, 19 and 25, 1 c.c. Van Cott's combined vaccine. March 22, pus smear negative, necrosis improved, discharge nil.

Conclusions.—Grave conditions may be progressing, though hidden. Variance in oral and rectal temperature in abdominal conditions. Virulent colon bacillus infections with much local devastation do not necessarily incite systemic reactions. Simple drainage of abdominal pus does not always remove all danger, as postoperative complications may prove very troublesome.

Paper: "Some Ocular Tumors and Their Lessons," Dr. F. C. Heath.

This paper consists of a report of the clinical history, treatment and pathologic findings in a series of tumors of the eyeball and orbit, illustrating different forms of growths, showing the advantages of timely and thorough removal and suggesting the possibility that prognosis after operation of such cases may be more favorable than sometimes supposed.

Paper: "What Every Woman Should Know About Cancer of the Womb," Dr. Bernays Kennedy.

Direct instruction of women is advocated. The object is to urge that early diagnosis is the real and practical hope for the cure of cancer and to disseminate this knowledge in a manner which will bring cancer to operation in the early stages, when it can be positively and permanently cured. It is due to the failure of securing the successful treatment of cancer of the uterus that should be obtained that the present campaign of direct education of women has been proposed. The early symptoms of cancer of the uterus have to do with vague and slight disturbances of the function of menstruation, and the recurrence of slight but irregular discharges without disturbance of sensation or necrotic discharge, and it is of the greatest importance that women should recognize the possible significance of various slight irregularities. An educated medical profession is essential to the eradication of cancer and an educated and interested public is no less necessary. The belief that cancer is incurable by operation is not based on facts. The duty of the physician is to overcome the prejudices of his patient by tactful presentation of the case. It is fatal to the patient for the physician to wait for physical changes in the cervix, such as proliferative or degenerative changes. It is the physician's duty to the public to urge that such an attitude toward possible cancer of the uterus is absolutely unwarranted, unjustifiable and culpable in the light of scientific knowledge.

DISCUSSION

Dr. W. F. Hughes: While angiomata, gummata, solitary tubercle and metastatic carcinoma are very rarely reported within the eyeball, practically the rapidly malignant glioma of the retina and the uveal sarcoma are the intra-ocular neoplasms which are found by the oculist. Glioma of the retina is a disease of early childhood and the percentage of recurrence following removal is high. Metastasis is not common. The uveal sarcoma, when discovered and treated properly early, gives rise to 25 to 40 per cent. of recoveries. The many endeavors to trace an hereditary influence have practically always been unsuccessful. Traumatism as well as prolonged inflammation has been suggested as an etiologic factor, but definite proof is lacking. The prognosis of intra-ocular

sarcoma seems better than that met with by the general surgeon. Two cases were mentioned to corroborate the essayist in the view that intra-ocular sarcoma is of rather low malignancy. The treatment of all malignant growths should be limited to immediate enucleation and complete removal whenever diagnosis is established.

Dr. Sharp: Intra-ocular tumors, sarcoma and glioma should be diagnosed and removed. Early diagnosis means prolonged life if properly treated. Not always easy to do this. There is no pain until second stage.

Dr. Foreman: It is necessary to educate the profession as well as the public to lessen the spread of cancer. We are apt to let patients drag along without advising measures radical enough. The public mistrusts the physician's ability to diagnose and properly handle a case of cancer. Misconception of danger of cancer on the part of the public is evident. This shows education is needed. The quack gets in his work because he says positively he can cure, and this is what the patient is seeking. The lethargy of the public is appalling. It must be awakened if we would lessen mortality. Our inability to control our patients is a great handicap. Early diagnosis is the only salvation, and this is difficult. The breast and uterus are usually primarily attacked. Most other carcinomatous lesions are secondary. This fact helps to a certain extent. Keep patients returning for examinations. Do not neglect pathologic examinations. Curettings or small section should be secured. Surgery is the treatment. Radium is indicated in postoperative cases and could be used in non-surgical cases.

Dr. Ketcham: With the Abderhalden test in early diagnosis, when cachexia is present there is no reaction because this ferment, which is both specific and protective, has been used up. When cancer is suspected and a positive test is found an extirpative operation is undergone. A second test should be made within a week or ten days which should be negative. After that, at intervals, the patient should be tested for recurrence.

Dr. Lee: I regret that every medical society in America cannot have a number of such papers. Cancer may be cured by early and thorough surgery. Cancer is always preceded by definite changes and proper attention to these predisposing causes will prevent the disease. There are many conscientious cancer pessimists and many who are not aware of the importance of early diagnosis, and as a result of this prostration many cases pass from operable into inoperable class. A strenuous effort should be made to overcome these evils. I am opposed to the publicity plan for the public, as it makes women more credulous and renders them easy prey for the charlatan, who depends on the press as a source of his business. I believe in fostering a confiding relationship between the family physician and his patrons. A special effort should be made to increase the tactics of doctors that they may be able to bring the sufferer to a timely inspection.

Dr. Kennedy: Many cases are treated too long for surgery to help. Many cases are operated when they are inoperable. Relief can be obtained by intravenous injections of selinum. All cases should be tested by Abderhalden's method. A few thousand cases will give statistics worth while.

Dr. Padgett: Education of the public is good. Education of the profession is better. Diagnostic methods are tedious to patients. Patients dread curements.

Dr. Pfaff: The public is not so bad. It took to tuberculosis education well. As to cancer, we have learned many things, but very few things definitely. We can depend on the public to listen with a willing ear when we learn definitely to make an early diagnosis. A woman will go to a physician once or twice yearly for examination if told to. Teaching one to wait for early hemorrhage is dangerous. Then the cancer is advanced.

Dr. Noble: Cancer of uterus is a terminal event, and must be discovered very early. All cases of cancer of uterus have an antecedent pathology. It is criminal for a doctor to treat this pathologic condition without examination for cancer.

Dr. Kitchen: We must begin some plan for public education. It is not difficult to get people to watch for certain things. If properly advised people are glad to do the things necessary to discover symptoms of cancer.

Dr. Eastman: Most cancers of uterus can be diagnosed twenty years in advance. A torn cervix should forewarn.

Dr. Bernays Kennedy closed the discussion.

Meeting adjourned. ALFRED HENRY, Secretary

Meeting April 14

Meeting at Hotel Washington, called to order by the President. Minutes read and approved. Attendance 54.

Program: Paper and case report on "Tumors of the Spinal Cord," Dr. C. F. Neu.

Experimentation, as well as clinical experience, has shown pretty conclusively that the structure and function of spinal cord are of such a nature that when a destruction of nerve elements takes place there occurs but little, if any, regeneration. Hence, the importance of early recognition and removal. The present case was a woman 47 years old. During the past nine years she had suffered recurrent attacks of pain in left side just beneath ribs, lasting for several days and then disappearing, the last attack occurring October or November, 1912, after which the pain extended to right side followed by numbness of limbs and body, and two weeks later with jerking of limbs, some difficulty and delay in urination, stiffness and difficulty in use of limbs and a tight, cordlike sensation around body at about level of umbilicus. Six months later unable to carry out voluntary movements. Muscle excitability exaggerated. Tendon-reflexes exaggerated, bilateral ankle clonus—both marked on left side. Babinski toe phenomenon present. Superficial reflexes could not be elicited. Tactile sense lost to level of a line running around the body midway between umbilicus and ensiform cartilage. Sense of pain retarded. Temperature sense impaired. Urinary, blood and skiagraphic examinations negative. Tumor was diagnosed, nature unknown. Patient operated. An elongated, ovoid, circumscribed tumor, when removed size of which was 3 cm. by 1.2 cm. by 5 cm. In six months patient was practically recovered.

Tumors of spinal cord are said to be relatively rare. Duration of spinal cord tumors depends on seat and character of tumor. In making a differential diagnosis, the following have to be considered:

(1) Neuralgia, (2) sciatica, (3) circumscribed serous meningitis, (4) vertebral tumors or caries, (5) hypertrophic meningitis, (6) chronic myelitis, (7) disseminated sclerosis, (8) syringomyelia, (9) tabes dorsalis.

Treatment of tumors of the spinal cord or its membranes, apart from those of syphilitic origin, is wholly surgical. Even in many of the syphilitic growths antisyphilitic treatment hitherto has been ineffectual. Recovery from effects of the growth usually takes place in about six months, but may take several years.

Case report: "Glioma," Dr. T. C. Hood.

Case referred to at last meeting by Dr. Sharp. Specimen presented, half the globe mounted in jelly, showing well the tumor.

Case that of a boy aged 4½. Left eye hit by a stone six weeks previous. Eye discovered to be blind. Tumor in vitreous seen by oblique illumination, probably antedated the injury. Yellowish reflex from pupil. Slight injection of globe, no pain. Prompt enucleation. Healing prompt. Artificial eye placed in six weeks and worn with comfort. Late report, no return, doing well. This form of intra-ocular tumor is very malignant and soon fills the globe and extends to optic nerve and tissues of orbit. If not recognized early, or allowed to get beyond the globe a rapid return of the growth after removal and death of the patient is certain. Early diagnosis and prompt removal the only course.

Case report: Dr. A. E. Sterne.

Exudative encephalitis, closely simulating brain tumor. Patient woman of 48, who had, for a number of years, manifested symptoms of a general nervous type, with difficulty in walking, frequent attacks of dizziness and vomiting, headache, some difficulty in vision, and who had gained enormously in weight very rapidly in the beginning of her illness. The incidence of the affection lay ten years prior to the present time, after she had suddenly received the shock of her husband's accidental death. Patient was in a state of complete disorientation as to time, place and persons; very delirious; completely helpless physically, and entirely confused mentally. Physical examination showed a weight of 280, irregular heart action, low pulse tension, very faint deep reflexes, pupils reactionless to light, and a considerable degree of papillitis. Patient had a temperature of 103.6, was unable to sit up or walk, or even stand erect, and all movements were incoordinate. Vomiting was very frequent and the general aspect of the case was one of profound prostration with excitement. Urination was extremely scant, highly concentrated and black in color. Typhoid was barred by blood examination, as was also syphilis, the Wassermann test being negative. After a few days the fever subsided, but patient remained completely delirious for several weeks. Under administrations of salicylates internally and externally, the patient made a splendid recovery and at the time of report was perfectly clear mentally and in good physical condition, able to walk about with assistance with perfectly steady gait; reflexes had returned and were approximately normal; there was no ataxia of movements and examinations of the optic fundi showed a practically normal appearance. Attention was called to the marked similarity of the symptoms presented, both prior to and during the period of acute illness, to those manifested by gross brain lesion.

DISCUSSION

Dr. Carter: In the diagnosis of spinal tumors, we will in the majority of cases encounter first, root or sensory symptoms. The root symptoms depend on relation of tumor to posterior roots and may be due to irritation or destruction. If a tumor is situated on the lateral or dorso-lateral aspect of the cord, the root symptoms will in all probability be unilateral and on the same side as the lesion, and they will be irritative with a zone of hyperesthesia or destructive with a band of anesthesia, depending on amount of pressure brought to bear on posterior roots. The sensory symptoms of cord involvement will first be disturbance of muscle sense and perversions of pain and thermal sense. As the most superficial tracts of the cord carry the fibers of these senses, tactile sense will only be involved later, as tactile sense fibers are more deeply located in the cord. Symptoms of muscle sense involvement will consist of slight incoordinatic and early muscle fatigue. Symptoms of pain and thermal disturbance will be perversions rather than paralysis, and will consist of tinglings, numbness, hot and cold flashes, etc. In any case cord sensory symptoms will be bilateral as the sensory fibers cross at different segmental levels. The motor symptoms of cord tumor will be due to involvement of the pyramidal tracts, and will consist of a spastic paraplegia with increase of tendon reflexes. Trophic disturbances in spinal tumor are not usually prominent on account of the few anterior horns which are involved. In regard to the spinal fluid in cases of spinal tumor; Sicard and Foix have found an increase in the albumin content, with a normal cell count, in cases of extradural tumor of non-syphilitic origin. In case there are degenerative changes in the cord; there is not only an increase in albumin, but an increase in the cell count as well. This may be considered of both diagnostic and prognostic importance.

Dr. Humes: My particular plea is for an earlier recognition of spinal-cord lesions by the general practitioner in whose hands these cases invariably fall first. A given case with motor and sensory disturbances of lower extremities particularly severe lancinating agonizing pains in extremities affected, in a case which gives no traumatic history to spine, should be immediately an object of suspicion, as relates to spinal cord compression. Regardless of cause, all cases showing increased reflexes, clonus, anesthesia, often superseded by hyperesthesia, a girdle sensation, together with tenderness over spine at a relatively corresponding point to sensory disturbance, even these few symptoms should warrant surgical treatment. Authorities agree that all cases should be operated and that 50 per cent. are curable, if operated before degeneration of nerve tracts. The treatment of cord tumors is surgical and time spent in medical treatment is worse than useless in 90 per cent. of cases. In operating, the upper limit of anesthesia should ordinarily correspond to middle of incision, as it is an easy mistake to approach the cord at too low a level. Do not be discouraged by slow results, as the return of normal functions may be delayed six, eight and twelve months, and complete function as long as two and three years.

Dr. Sterne: It makes no difference whether a tumor is of brain or spinal cord, extramedullary or intramedullary, it should be removed, barring luetic gumma. Removal by blunt end of instrument is best.

Dr. Brayton: We are in doubt about the action of salicylate as much as we are about potassium iodid.

Dr. Sharp: These cases of glioma are rare. We don't appreciate them. Dr. Hood has saved a little girl's life.

Drs. Hood, Neu and Sterne closed the discussion.

Meeting adjourned. ALFRED HENRY, Secretary.

Meeting April 21

Meeting at Hotel Washington, called to order by President. Minutes read and approved. Application of Dr. J. Otway Puryear read for first time. Attendance 80.

Program.—Report of cases: (1) Compound Dislocation of Ankle, (2) Uterine Suspension during Pregnancy, Dr. E. E. Padgett.

1. F. S., male, aged 22, colored. Suffered accident Feb. 13, 1914, in which a compound fracture of left ankle was produced. External malleolus was broken off at its junction with tibia. Capsule of joint and soft structures with skin ruptured, and lower end of tibia with articulating surfaces exposed. Synovial fluid escaped. Incision in joint capsule enlarged, and after iodine sterilization dislocation reduced. Capsule of joint stitched up and skin incision closed. Plaster cast applied. No infection developed, and motion not limited at end of two months.

2. Patient, aged 23, white. During first pregnancy symptoms of incarceration appeared but were finally corrected by repeated bimanual manipulations, and pregnancy continued to a normal delivery. After puerperium, uterus, which had been in position of retroflexion for a long time, returned to same position. About thirteen months later again became pregnant, and at about second month developed a threatened abortion. Abdomen opened under ether. Varicose veins dissected out of left broad ligament and uterus suspended by modified Gillam operation. Symptoms disappeared and pregnancy continued to a normal delivery. Puerperium normal, and position of uterus remains good.

Paper: "Diagnosis and Surgical Treatment of Goiter," Dr. Goethe Link.

Simple goiter may be overlooked as the cause of important symptoms. Intrathoracic extension of the enlarged thyroid below ring formed by the first ribs, sternum and vertebra will cause great disability and if large enough, death. The symptoms of hyperthyroidism, though common, are frequently not traced to the toxin of a goiter. Two conditions always present in toxic goiter are tachycardia and enlarged thyroid. It is doubtful if the effects of well-established Graves' disease are ever entirely recovered from. The word "cure" must be relative, including arrest of progress of the disease. Several cases of mistaken diagnosis as to hyperthyroidism were related. One patient with substernal goiter pressing on nerve-supply of vocal cords, with husky voice and emaciated from hyperthyroidism, had been treated for tuberculous laryngitis. Every woman with average pulse greater than 72 should have the thyroid examined. If there is a goiter belt, Indiana is a banner state. Simple goiters often become toxic. The heart is damaged in many cases of simple goiter. The use of iodine is harmful in every form of goiter except the rare cases where there is a deficiency of thyroid secretion. Hyperthyroidism is a frequent and important complication of

medical, obstetrical and surgical cases. To show the innocence of thyroidectomy in simple goiter, a case was reported and pulse record shown. Postoperative distress very slight and recovery rapid. A case of operation for severe hyperthyroidism was reported in contrast. The importance of the graduated operation was emphasized by case reports.

The earlier that operation is done for hyperthyroidism, the nearer it approaches operation for simple goiter with its slight danger. The writer's experience covering twenty-five operations on twenty patients was reported. All were cases of toxic goiter except two. There were sixteen thyroidectomies with one death; all living patients have been benefited, though the time has been too short to pronounce a cure. Ligation was done twice in hopeless cases for a palliative measure, the patients dying one year and six months later. The technic and cases were shown by lantern slides. The importance of skilled anesthesia was brought out, the writer preferring ether and gas oxygen.

DISCUSSION

Dr. Keene: There have been great advances along the line of goiter. In cases of increased heart-rate in the gland enlargement we have decided the secretion is stimulating to heart. Crile's conclusion in handling goiter is unique. His method of stealing precludes possibility of reaction. Later we will know more about which cases should be operated and which not. Ductless glands are being studied very much in laboratories the world over.

Dr. Eastman: We can do surgery in pregnancy as well as not. Dr. Padgett's report shows this. Dr. Link's paper was complete. I have observed the thyroid gland in many conditions. We must mention Dr. Crile among goiter operators. Crile sets out that Basedow's disease is one in which fear is the predominating factor. We must deal with exophthalmic goiter of fright. I think we can all diagnose goiter with few symptoms. Tremor, tachycardia and exophthalmos should be remembered especially. Two cases were lost, partly, probably because they were treated too long. Not a medical case. Exophthalmic goiter at one time was a simple goiter. As to anesthesia I have used ether but am getting to use a local. Two cases have had trouble with their voices afterward in general anesthetic.

Dr. Oliver: Many cases of injury could be helped if every doctor carried some iodine and a few instruments. We can amputate any day. Never saw a case of tetanus injured in cinders. Had four deaths in first sixteen cases thyroidectomies. Simple goiter operation is not a simple thing. Polar ligation could have saved two cases. Cited case of both eyes sloughing from exophthalmic goiter. Graduation method and stealing gland are the two things I would recommend.

Dr. Dodds: Cited case of his mother, who had tried everything for goiter until surgery cured the case. There are three generations of thyroid in my family. Thyroid means surgery.

Dr. Sterne: I want to emphasize element of fear in thyroid cases. This fear is allayed in Rochester by patients unoperated seeing patients having been operated. Many of these cases are luetic. There we have a medical and surgical case combined.

Dr. Link closed the discussion.

Meeting adjourned. ALFRED HENRY, Secretary.

Meeting April 28

Meeting at Washington Hotel, called to order by President. Reading of minutes dispensed with. Application of Dr. B. M. Gundelfinger was read first time. Attendance 68.

Program: Paper, "Colliculitis," Dr. P. E. McCown.

The perfection of the modern urethroscope has revealed many interesting conditions never before seen in the living subject. It has made easy treatment to the urethra and bladder neck colliculus. Colliculitis varies from the highly inflamed and bleeding state to, in the chronic conditions, a pale, grayish, atrophic scar formation. The colliculus is described as a mound of tissue with a more or less elliptical or circular base, which rises into a pyramidal or cone-shaped body, one- to three-twelfths of an inch in height, with a pointed, dome-shaped or flattened top and is surrounded by openings of the prostatic ducts. The symptoms of this condition are illustrated by case report as follows: Married man had practiced withdrawal seven years; complained of urethral discharge, raw burning sensation in perineum and bladder neck, diminished sex power and desire. The pus proved to be sterile, thus showing non-venereal causation. Endoscopic examination showed a large, deep red, bleeding colliculus, extremely sensitive. Three application of silver nitrate through the endoscope relieved the painful symptoms and reduced the organ to proper size and color. The belief is expressed that in addition to the foregoing symptoms, those of premature ejaculation, impotence and the other male neuroses, are not entirely due to the prostate and seminal vesicles but are the result, in some instances, of colliculitis; for the colliculus is well supplied with sensory nerves, obstructs and receives the brunt of frequent voidance of urine which has a tendency to prolong the inflammation. It behooves us, therefore, when a case presents sexual symptoms or painful symptoms referred to bladder neck to make a careful endoscopic examination of posterior urethra; this is specially true when the case has not responded to urethral dilations, irrigations or prostatic massages. Under treatment, the galvano-cautery and the Oudin high frequency current are recommended, especially in cystic conditions; bladder irrigations in presence of pus; posterior urethral installations of silver nitrate. The best results were had by direct applications of silver nitrate through posterior urethroscope and special emphasis is given the use of this instrument in diagnosis and treatment of this condition. In the chronic atrophic form of this disease irrigations and dilations with sounds and Kollman dilator are recommended.

"Technic of the Wassermann Reaction," was the title of the paper read by Dr. Bernard Erdman. After discussing the complement-fixation test, definitions of terms frequently used, was given in detail. Charts illustrated the titration of various factors. After the original method and a presentation of underlying principles of Wassermann reaction, the various methods of different workers at home and abroad were covered. The method of Citron, 1914, and the method of Dr. William L. Moss, as found in Emerson's clinical diagnosis, were discussed in detail. Various titrations and set-ups for titration of the antigen, hemolysin and other factors were illustrated. Interpretation of results closed the paper, together with description of the necessary apparatus.

DISCUSSION

Dr. Hamer: In reference to colliculitis there is little positive literature on the subject. As to treatment it varies. Chronic and acute cases demand different treatment. When cystic, a puncture eradicates. Silver nitrate solution seems a popular remedy. High frequency current helps cases where papillomatous growths are found. Dilatation is necessary in these cases.

Dr. Charlton: I wish to discuss Dr. McCown's paper as if from the standpoint of disagreement and yet not actually so. Colliculitis as a definite conservatively determined process of disease is all that he has described it as being and requires intelligent direct and general treatment. Colliculitis as a vogue or a specialists' fad, as I am afraid it is coming to be, may be greatly over-emphasized and become productive of harm. Over several years I found in my own field of work touching these reddened follicles through an endoscopic tube with silver. Patches of apparent discoloration and thickening were so treated over long periods of time. One such case with a chronic discharge and many shreds in the urine went abroad for three months and dropped all thought of his local trouble for that period. He came back entirely well. Other cases have acted likewise, so that in more recent years I have begun to think that after drainage is assured by the relief of connective tissue bands (strictures) and the infective principle has been eradicated, that the less active local treatment indulged in the better. I refer to the "picking at" policy and this is what I fear from the recent emphasis laid on colliculitis. The old chronic prostatic with a scar mass instead of a gland mass for a prostate will not be cured and his sexual virility restored by applications to the veru montanum. It will be the wise doctor who makes a strong application to the veru montanum occasionally and keeps "hands off" the rest of the time. We can't cure all cases.

Dr. T. C. Potter: The Wassermann test is difficult to do. Blood serum is incubated thirty minutes before putting in ice box. This gives more serum. Have always used a cholesterinized antigen. An amboceptor 1 to 3,200 is preferred. The complement varies, hence it should be titrated.

Dr. Langdon: The past ten years constitute an epoch in the history of syphilis that is unparalleled in the study of any other disease. The principle on which the Wassermann reaction is founded is scientifically accurate, but our trouble lies in execution of the test. We are agreed as to specificity and reliability of the reaction but much is to be said of technique. Much discussion has centered in the antigen. There are dozens each having its own following. The two in most common use are the alcoholic extracts and acetone insoluble extracts of human and animal tissues. The complement-deviation test for syphilis is not an absolute thing. It is influenced by treatment and by the stage of the disease. The Wassermann test is the best we have for diagnosis of certain cases of syphilis. It should be used in controlling treatment. The laboratory man can report only the reaction in an unknown blood. The physician must interpret it.

Dr. Earp: Asked for information regarding the fallibility or infallibility of the Wassermann test.

Dr. Brayton: There has not been enough of the Wassermann in our society. Sixty-five per cent, of our clinic patients have syphilis. The Wassermann will

enable us to make a proper reparation. But we must be conservative.

Dr. Cregor: In colliculitis we must not forget prevention. When in that kind of practice I learned to refuse treatment to those whom I felt sure would not carry out all instructions. The Wassermann must be used as an aid.

Drs. McCown and Erdman closed the discussion.

Meeting adjourned. ALFRED HENRY, Secretary.

BENTON COUNTY

Benton County Medical Society met in called session, April 28. Dr. Ward A. Smith of Otterbein was elected president, Dr. H. G. Bloom of Oxford was elected secretary.

Resolutions concerning amendment of Harrison Anti-Narcotic Bill ordered drafted and sent to Senators Kern and Shively.

Adjourned to meet the first week in June.

H. G. BLOOM, Secretary.

BOONE COUNTY

The regular meeting of the Boone County Medical Society was held at the Lebanon Public Library, April 7, 1914. Dr. Chauncey Bassett of Thornton was in the chair; eleven members present.

A paper was read by Dr. F. A. Tucker of Noblesville on "The Advantages of Blood-Pressure Readings in Diagnosis."

Dr. Will Shimer of the Indiana State Board of Health presented a paper on "Rabies in Indiana."

Discussions on both papers were led by Drs. Beck and Williams of Lebanon, Little of Whitestown, and Umberhine of Mechanicsburg.

A resolution of sympathy for Dr. J. K. Ball, a member of this society, was passed. Dr. Ball is at present in the Methodist Hospital, Indianapolis, having undergone an emergency operation for appendicitis.

A resolution was passed showing in proper manner our approval of the policy of the Lebanon *Daily Herald* which will not accept fraudulent medical advertisements.

The secretary was instructed to write the senators from Indiana requesting them to oppose the objectionable amendment to the Harrison National Narcotic Bill.

The councilor for the Ninth District was present and offered some helpful suggestions.

Adjourned, after which refreshments and cigars were served. M. A. ARMSTRONG, Secretary.

DELAWARE COUNTY

At the regular meeting of the Delaware County Medical Society held at Muncie, April 3, F. A. Wildason, D.D.S., of Eaton, Ind., read a paper entitled "The Borderland of Medicine and Dentistry."

Available evidence shows that pyorrhea alveolaris was recognized in ancient times and that oral inflammation was probably coeval with man. Oral sepsis has a marked influence, directly or indirectly, on most organs of the body. The oral cavity is nature's bacteriologic laboratory for the propagation of pathogenic microorganisms; it is a force not taken into due consideration by many physicians in treatment of

disease. In many instances if the foci of infection found in the mouth be removed, nature will make her own repair. Today we credit to a great degree the influence of a foul, diseased, septic, oral cavity on such disorders as gout, rheumatism, diabetes and anemia. We seldom have tonsillitis without pyorrhea, and arthritis and endocarditis frequently follow tonsillitis. Pyorrhea may be of either mechanical, chemical or thermal origin. Mechanical causes include excessive friction with harsh brushes, injudicious use of tooth picks, poorly fitted crown or bridge work, particles of food collecting around artificial dentures, etc. Chemical irritants have an over-stimulating effect on the mucous membrane and are found in tooth powders and pastes and medicines used for one purpose or another. Extremely hot drinks and ices are thermic agents. There is no question but that many low-grade fevers and numerous "stomach troubles" have their inception in filthy mouths. Scientific investigation demonstrates that the same microorganisms (streptococci and staphylococci) that are found in pyorrheic alveolar pockets are found in the vomit of those suffering from septic gastritis. Johns Hopkins Hospital now has a dentist on the regular staff. Patients are examined and, if necessary, treated for oral sepsis before major surgery is attempted. Removal of pathogenic organisms, filling decayed teeth, and extracting roots for tubercular patients has shown a marked decrease in the bacilli in the sputum of such patients. It behooves physicians and dentists to bear in mind that the mouth is an incubator and that it is usually in working order. The average practitioner of medicine ought to supplement his work, when he suspects that the mouth may contain foci of infection, by calling to his assistance a well-qualified dentist just as he would a specialist along other lines. Clean mouths are a rarity. Many persons are rendered more susceptible to disease by lowered vital resistance created by tooth, mouth and jaw troubles. Extreme care should be taken in cases of protracted illness especially during typhoid or some eruptive fevers. Because of the neglect of thorough cleansing, the teeth accumulate unwholesome or purulent deposits, and when mastication is resumed these are taken into the previously weakened alimentary tract and cause a reinfection, relapse and perchance, death. Until recently pyorrhea was treated locally only, but it is now known that systemic treatment is usually indicated also. In most diseases caused by bacterial infection there are certain poisons or toxins produced which are absorbed by the blood-stream giving rise to fever and other constitutional symptoms, and this is one reason why autogenous vaccines are a very satisfactory adjunct to other treatment. Pyorrhea is influenced by social conditions; rich foods and alcohol, when taken in excess are factors, and no age or condition is exempt; a mixed infection is found usually in the pus pockets.

In treatment, lowered resistance, faulty metabolism and autointoxication must be considered. Patient should be told frankly that his condition requires time and patience for cure. The time is coming when dentistry will be a surgical specialty, and a knowledge of pathology, therapeutics and immunity, necessary to good work. Pyorrhea can be cured, but its treatment is a specialty in itself.

Adjourned.

H. D. FAIR, Secretary.

DUBOIS COUNTY

The Dubois County Medical Society held its regular meeting, April 21, at Huntingburg, Dr. Louis Luke-meyer presiding.

Minutes of March meeting read and approved as read.

Dr. O. A. Bigham read a paper on "When to Use Forceps in Obstetrics," presenting the subject in a scientific and skilful manner.

The discussion which followed was extensive, instructive and to the point.

Dr. Fred Rust read a paper on "The Social and Business Aspect of Medicine." This paper was enthusiastically presented and received in the same spirit by the members. The doctor showed that a certain social spirit was lacking in our association, urged the members to attend the meetings to get better acquainted and to profit in the exchange of professional views, and, in short, to get together and be real brothers professionally.

The discussion which followed was entertaining and full of good fellowship. Plans were discussed for advancing the social spirit of the association, and the Huntingburg physicians extended an invitation to all the physicians in the county to be present at the next meeting (a banquet and smoker to follow same), with the idea of adding them all as members to the association.

The meeting was one of the best the society has ever held, and the next meeting at Huntingburg, May 19, is looked forward to as an epoch making one as to the point of good fellowship. "Let's get together and remain so." The scientific program for next meeting will be announced later.

Adjourned.

E. A. STURM, Secretary.

ELKHART COUNTY MEDICAL SOCIETY

Regular April meeting called to order at 8 p. m., April 2, by Dr. Becknell, Chairman pro tem., in office of Dr. Kreider, Goshen. Minutes of March meeting read and approved.

Dr. W. B. Kreider in his paper on "Iritis" reviewed anatomy and physiology of anterior ophthalmic field. Called attention to pain, photophobia and impaired or lost vision as subjective symptoms; objectively—lacrimation, mucus discharge, characteristic redness of inflamed area, finding of adhesions under atropia. Must differentiate from glaucoma and from conjunctivitis. Three forms of iritis: serous, plastic and parenchymatous. Serous form is found in sympathetic ophthalmia and in syphilis. In the latter iritis shows up in from two to nine months after initial chancre. Other cases develop during course of diabetes, acute infections, tuberculosis, and in old age, the senile type. Tuberculous iritis may be cured but the eye is usually lost. Treatment: Keep pupil dilated, using 1 per cent. atropin. Scopolamin a treacherous drug. Treat the system as well as the eye, whatever the cause.

DISCUSSION

Dr. Eby, Goshen: Is not difficult to diagnose typical case of iritis. The atypical cases hard to diagnose in early stages. One attack predisposes to succeeding attacks. Finally there is total occlusion; glaucoma and eye is lost. One class of cases comes in after running two weeks or more and try as you may it is impossible to dilate the pupil. Second class; those

not diagnosed early enough by physician. Dare not use atropin in glaucoma.

Dr. C. F. Fleming read a paper on "Cancer of the Rectum and Sigmoid." Sex ratio in cancer of rectum in men three to women one; 4.8 per cent. of all cancers occur in the rectum and 6.2 per cent. of all cancers occur in rectum and sigmoid. Heredity influences causation of cancer apparently in 12 per cent. of cases. The "cancer age" is 40 to 45. Hemorrhoids precede carcinoma of the rectum in 15 per cent. of cases.

Histologic types: (1) epitheliomatous, (2) adenoid, (3) medullary, (4) scirrhus. All may undergo colloid or myxomatous change. Epithelioma occurs at mucocutaneous border at anus and shows small nodular wart-like elevations with indurated base. Ulceration gives rise to watery, ichorous discharge. Adenoid type shows soft, gelatinous, elevated, lobular masses from which may be expressed "cancer-juice." Adenoid is most frequent in occurrence. Medullary is most malignant; exhibits soft, nodular mass, ulcerating, with base of dense fibrous tissue, rapid growth. Scirrhus—gradually contracting stricture, picture of intestinal obstruction, no pain, little discharge, no hemorrhage, no cachexia or sepsis, least frequent. Plaque-like deposits beneath mucous membrane occur early. "Morning diarrhea." Characteristic fetid discharge of rectal cancer described by Allingham.

Nothnagel estimates duration of life in cancer from 6 to 24 months. Cases of rectal and sigmoidal cancer are not recognized early because of neglected local examination.

Treatment.—Palliative: irrigation, curettage, colostomy, entero-anastomosis. Relations of sigmoid and rectum to peritoneum, middle sacral artery and male urethra, blood and lymph vessels and glands. Curative: dissecting out growth, sigmoid-rectal anastomosis if possible. Two-step operation, preliminary colostomy through left rectus and then later excision of growth and anastomosis.

DISCUSSION

Dr. C. W. Haywood, Elkhart: Mayo-Kraski operation. Confirms diagnosis by means of bismuth injection and x-ray. Many patients would prefer death to a colostomy.

Dr. M. K. Kreider: Cited a case of school-teacher who delayed examination a year from "fear that she had cancer." Examination showed hard, fibrous mass extending around rectum. Operated three weeks ago by Mayos.

Dr. J. C. Fleming, Elkhart: Discussed case which delayed local examination two years. Large inoperable rectal tumor found. Epitheliomata of relatively slow growth. Mikulicz operation in two or three stages: (1) make anastomosis and deliver sigmoid tumor, (2) amputate growth after a few days. The more extensive anastomosis operations should be done only by most expert surgeons.

Dr. I. J. Becknell, Goshen: Examine patient in crouch position.

Dr. H. K. Lemon, Goshen: Proctoscope should be used in the examination of elderly persons for piles. Case cited which was operated for external hemorrhoids and a second time and finally went to the Mayo clinic when growth was found to be inoperable. Syphilitic gummata simulate carcinoma. Case cited of gumma of rectum removed and case died of general paresis three years later.

Dr. C. F. Fleming, Elkhart (closing): Careful history taking emphasized.

Application of Dr. E. J. Hagenbaugh, Elkhart, read and laid on table for one month. Motion made and carried that we proceed to ballot on application of Dr. S. A. Edmunds for membership. By vote of 13 to 4 the name of Dr. Edmunds was rejected.

Adjourned.

J. A. WORK, JR., Secretary.

HANCOCK COUNTY

Regular meeting of Hancock Medical Society was held at Columbia Hotel in Greenfield, March 11, attendance 10, Dr. P. E. Trees presiding.

Following the banquet at 7:30 p. m., the regular order of business was disposed of. Decided to entertain the Sixth Councilor meeting on May 14, 1914.

Dr. H. S. Thurston of Indianapolis read the paper of the evening on "Serum Therapy."

Paper freely discussed.

Adjourned.

J. L. ALLEN, Secretary.

LAKE COUNTY

Regular meeting of Lake County Medical Society was held at the Gary Commercial Club Thursday, April 9, at 7 p. m., Dr. Iddings presiding. There were thirty members present.

Minutes of March meeting read and approved.

Dr. Iddings reported a case as follows: Male, troubled with amebic dysentery for fifty years. X-ray showed hour-glass stomach, ptosis of transverse colon and numerous strictures of the gut, with a narrowing of lumen of small bowel and colon. Autopsy confirmed diagnosis made as result of x-ray examination. Dr. Iddings presented a specimen taken from the bowel, showing numerous strictures and a number of healed ulcers.

The program for the evening was a symposium on "Gastric and Duodenal Ulcers."

E. E. Evans, "Gastric and Duodenal Ulcers."

M. S. Hopper, "Functional Neuroses of the Stomach and Reflex Gastric Symptoms."

Charles A. Elliott, Chicago, "X-Ray Findings in Gastro-Intestinal Conditions." Dr. Elliott exhibited some fifty slides showing both normal and pathologic conditions.

DISCUSSION

Dr. Hosmer: Examined a case recently which had had duodenal ulcer five years ago. Medicinal treatment, rest in bed and restricted diet. No symptoms since.

Dr. Elliott: One must make frequent analyses of stomach contents in order to successfully treat these conditions.

Dr. Hopper: Male, aged 55. Sudden attack of vomiting. Stomach washed out one or two times daily for some weeks, then patient could stand it no longer. Was then fed per rectum for two months, when death occurred. Autopsy: Marked atrophy of stomach. Floor and anterior surface covered by ulcers. Serous coat as thin as tissue. Feeding by stomach would surely have brought about a perforation.

Dr. Evans: Don't be too hide bound in these cases. If we haven't the time and equipment to properly diagnose and treat these cases let's send them to the man who can do it. What are we going to do with a case such as I saw a few moments ago? Male, 22.

history of vertigo, nausea and vomiting for past year. During present attack he lost consciousness. Tender area, about size of dollar, over pit of stomach. This man barely makes a living. How are we to give him proper treatment and feeding under such conditions? This is a case for the social service.

Dr. J. W. Iddings: These pictures are a revelation, particularly those showing the colon.

Dr. Gibbs: Have not some of the old teachings as to the anatomy of the abdominal organs been found to be fallacious?

Dr. Elliott: This is live anatomy; the other is dead-house anatomy. I would like to mention one fact not generally known. It is possible, in thin patients, to palpitate the pylorus. Another point, you cannot estimate free hydrochloric acid in examination of stomach contents after a very short time. The examination should be made in a very few minutes after obtaining the contents from the patient.

Dr. Zarrington: Physician who had no symptom of gastric trouble was suddenly attacked with vomiting and hemorrhage. Was operated on immediately and large perforating gastric ulcer found.

Dr. Elliott: Primary hemorrhage is frequently the first symptom of a gastric ulcer.

On motion, President Iddings thanked Dr. Elliott on behalf of the society for his most excellent talk.

Adjourned.

E. M. SHANKLIN, Secretary.

MADISON COUNTY

Madison County Medical Society met in regular session in Public Library in Anderson, March 24, 1914. Vice-President L. F. Schmauss in the chair and 16 members present.

Application of Dr. Olive Wilson presented and referred to Board of Censors to be reported at next meeting.

Dr. Irwin exhibited a case of pruritis senilis.

Dr. Conrad read an excellent paper on "Infant Stools as a Diagnostic Measure." He said examination of stools in diseases of digestive system and in babies who do not seem to gain in weight either on woman's or cow's milk, is as important as examination of urine in diseases of kidney and bladder, examination of blood in anemia to determine the diagnosis, or in examination of spinal fluid to distinguish between epidemic, cerebrospinal, tubercular or other forms of meningitis. There are three methods of examining stools, macroscopic, microscopic and chemical. Most common abnormal color is green; the shade may vary from a delicate grass green to a dark spinach green. The darker the green the greater the significance. The curd is the most common abnormal constituent, there are two kinds, proteid and fat. Proteid curds sink in water, fat will not. Proteid test, curd hardens in formalin. Fat test curd dissolved in ether.

Dr. Weir Miley reported a case of septic endocarditis; he gave a graphic description, symptomatology and post-mortem findings.

Adjourned.

Meeting April 28

Meeting called to order by President, Dr. S. C. Newlin, with twenty members and seven guests present. Minutes of previous meeting read and approved. Dr. Olive Wilson and Dr. J. J. Gibson were elected to membership.

Dr. A. B. Graham of Indianapolis read a paper on "Chronic Intestinal Stasis."

Adjourned.

ETTA CHARLES, Secretary.

ABSTRACTS

NEW SIGN IN PNEUMOTHORAX

In a careful study of eleven cases of induced and artificial pneumothorax in consumptives, J. L. Pomeroi, Monrovia, Cal. (*Journal A. M. A.*, March 7), has observed in every case a spasticity and rigidity of the rectus and other abdominal muscles in the upper quadrant of the abdomen on the same side as the lesion. In his most recent case the spastic condition of the upper segment of the left rectus and the region of the epigastrium was so marked as to make a visible tumor. The patient, a physician, noticed this himself and was much interested, as it seemed to vary with the tension of the chest. The area was also hyperesthetic. The symptom is constant in all cases, but so far as he has seen has not been noticed previously in pneumothorax. He hopes that if it is verified by other observers it will prove a valuable guide in the production of artificial pneumothorax. A fuller report is promised.

HEMOLYSIS FROM DISTILLED WATER INJECTION

A. B. Krumbhaar, Philadelphia (*Journal A. M. A.*, March 28), observed in the performance by a physician of a clinical test on himself calling for intravenous injection of distilled water before applying it to patients, found that sufficient hemolysis was caused to produce chills, fever, considerable malaise, albuminuria, and hemoglobinuria lasting about four hours. It was afterward estimated that the individual weighed 84 kg. and as between 300 and 400 c.c. of water were injected in about fifteen minutes, in addition to the relatively isotonic drug solution used, the amount of water introduced was about 0.4 per cent. of the body-weight. As a search in the literature did not give definite statements as to the amount of distilled water that could be thus given without inducing hemolysis, he determined to experimentally investigate the matter. It has been known since the time of Johannes Miller that intravenous injection of water might cause hemolysis but that this was avoided if a certain proportion of salt was added. The experiments of the author were performed on dogs. The following is a summary of the results: "1. Rapid intravenous injection of distilled water, in amounts equal to from 2 to 3 per cent. of the body-weight or more, will cause in the dog transient hemoglobinuria and albuminuria. 2. Lengthening the duration of injection time from five to forty-five minutes is without noticeable effect, though a much slower injection might give different results. 3. Hemoglobin-stained urine usually appears in the bladder catheter in from twenty-five to thirty minutes after the beginning of the injection. The hemoglobinuria lasts from four to sixteen hours, depending of the severity of hemolysis. 4. Much smaller amounts (as low as from 0.4 to 0.6 per cent.) are sufficient to cause a noticeable hemoglobinemia without hemoglobinuria. 5. Hemoglobinemia appears within from two to four minutes after the beginning of the injection and may last twenty-four hours. 6. In doses that just fail to cause hemoglobinuria, albumin and bile may appear in the urine the next day. 7. No noticeable anemia is caused, but there is a temporary decrease in the minimal resistance of the red blood cells." The tabulated results of the experiments are given.

TRANSFUSION IN DIABETES

B. O. Raulston and R. T. Woodyatt, Chicago (*Journal A. M. A.*, March 28), review and criticize the experiments that have been made that support the view of the connection of the pancreatic function in the normal utilization of sugar. If correct, it might be inferred that clinical blood-transfusion might be at least of temporary value in the treatment of diabetes and they say, that in view of the practical importance of this point, they have long had it in mind that, when the stage of diabetes is reached when intravenous therapy is used, it might be well to try the substitution of fresh blood for sugar solution or alkali. In a case of diabetes mellitus approaching its termination in which all known expedients had failed, they tried the experiment of transfusion. A brother, two years older than the patient was the donor and the transfusion was made by Drs. Curtis and David according to the method devised by them. The results were not favorable. They say: "The transfusion of 500 c.c. of peripheral venous blood from a healthy male donor into the peripheral veins of a brother suffering from severe diabetes mellitus has a deleterious effect on the metabolism of the latter, as evidenced by a marked rise in the output of sugar, ammonium, and acetone bodies, and an increase of the dextrose-nitrogen ratio."

DIAGNOSIS OF SYPHILIS

Experience with a sero-enzyme diagnosis of syphilis according to Abderhalden's method is described by F. W. BAESLACK, Detroit (*Journal A. M. A.*, March 28), who gives tabulated results in forty-six cases. The tissues made use of in his experiments are the glistening white pearly gummas resulting from the inoculation of rabbits with syphilitic tissue or blood of patients affected with syphilis. The mucoid degenerations thus caused contain the spirochete in large numbers. The technic is described in very full detail. Eight of the serums came from patients in the primary stage of the disease, eighteen in the secondary; seven in the tertiary; five were from tabetics; seven from paresies and one from a case of congenital lues. There were also tested four serums from normal persons, three from patients with chancroid and two from scarlet fever patients. One of the scarlet fever patients gave a positive Wassermann but a negative sero-enzyme reaction. In the other nonsyphilitic cases, the Wassermann and sero-enzyme findings correspond. The cerebrospinal fluid obtained from nine cases of tabes and general paresis give a positive Wassermann while the sero-enzyme test was negative showing the absence of the enzyme in the cerebrospinal fluid and the difference in the factors entering into the Wassermann from those bringing about the sero-enzyme reaction. While the Wassermann reaction at times is negative in the primary stage of syphilis, the sero-enzyme reaction was positive in all the eight cases. In the eighteen secondary cases, there were four negative Wassermans but in all the sero-enzyme was positive. Baeslack suggests that the specific enzyme in the serum of syphilitics is probably directed against the degenerated cell proteins rather than against the infecting agent. The sero-enzyme reaction seems to be specific and demonstrable at an earlier period than the complement-fixation test.

PTOSIS OF STOMACH AND COLON

C. A. L. Reed, Cincinnati (*Journal A. M. A.*, March 28), describes his method of operating for displaced or ptotic stomach and colon as practiced by him during the last five years. The first half of his procedure consists in exploration of the lower abdomen. Where no redundancy of the sigmoid is discovered or suspected, a vertical incision of about 8 cm. is made in the middle line. When the case is otherwise the abdomen is opened by the Pfannenstiel incision across both recti about an inch above the symphysis. The alimentary canal is explored beginning preferably with the cecum and following the course of the ileum, adhesions are broken up and the appendix removed. If the sigmoid is redundant it is fixed to the abdominal wall by stitching the proximal layer of the meso-sigmoid to the parietal peritoneum, usually with a continuous suture, tightly drawn and care being taken not to wound the chyle or the blood-vessels. The incision is left unsutured for a while until the second half of the operation has been completed, when closure is made by the laminated suture. The second half of the operation, fixation of the ptotic colon and when necessary, the stomach, as nearly as possible in their normal position, is described as follows: "1. The upper zone of the abdomen is opened by oblique incision about 8 cm. in length, extending along the right costal margin upward and inward to a point corresponding to the second costal cartilage, and thence directly across both recti muscles to a point corresponding to the opposite costal cartilage. 2. The lower margin of this wound is everted and the peritoneum is stripped back a distance of approximately 1 cm., thus exposing the under surface of the deep fascia. 3. The ptotic colon and stomach with both omenta are now brought up and are delivered through the incision, the colon being spread out on a warm, moist towel. 4. An opening is made into the gastrocolonic space, into which one or two fingers are passed. 5. With these two fingers acting as guides, half a dozen or more ligatures half an inch apart are passed parallel to each other in and out through the mesocolon, extreme care being taken to avoid all blood-vessels and chyle-ducts. When all these ligatures have been passed each is tied, thus shortening the mesocolon by several inches. 6. A long strand of chromicized catgut is now employed for a continuous suture, which is fixed in the deep fascia at the lower and outer tip of the wound. It is then passed through the base of the greater omentum, along the margin of the colon in such a manner that, when tied, the outer surface of the base of the omentum is tightly approximated against the deep fascia, leaving the omentum to hang down, curtain-like, on the inside of the abdomen. The continuous suture is then carried across by taking a small bite of fascia and a larger bite of omentum, until the 30 cm., or more of omentum has been implanted in 8 or 10 cm. of the everted flap of the wound. Great care must be taken to avoid the omental blood-vessels. 7. The wound is closed by a continuous buttonhole suture of chromicized catgut passed through the superficial fascia, muscle and deep fascia of the lower lip, catching the smaller omentum and coming through the peritoneum, deep fascia, muscle and superficial fascia of the upper lip of the wound. This continuous suture may be fortified by a few figure-eight sutures of silkworm gut, the inner loop catching the margins of the superficial fascia and the outer

loop embracing the fat and skin." He has used this technic in a long series of cases and promises a further communication.

GASTRO-ENTEROSTOMY BY A PLASTIC FLAP

CARL BECK, Chicago (*Journal A. M. A.*, March 21), gives an account of some operative procedures performed by him and Alexis Carrel in 1904 and 1905 in forming a union between the stomach and esophagus by means of a flap cut from the large curvature of the stomach and transformed into a tube by continuous suture, and gives the technic of the method which he has for some time used, as well, in gastro-enterostomy. The end of the completed tube is implanted into the side of the jejunum not far from the Treitz ligament. He calls attention to the necessity of suturing the duodenal arm of the jejunum up along the side of the new tube in order to insure the flow of the stomach contents through the distal portion of the jejunum. He reports the method as of not much greater difficulty than the ordinary gastro-enterostomy.

FORMALDEHYD

HUGH MCGUGAN, Chicago (*Journal A. M. A.*, March 28), has studied the migration, fate and changes of formaldehyd in the body. He reviews the former literature of the subject and the claims of beneficial action of formaldehyd vapor inhalation as made by some authorities. He publishes protocols of his experiments showing that it is rapidly absorbed from the lungs and the gastro-intestinal tract and that formic acid is easily produced in the body from formaldehyd. Small doses disappear rapidly from the blood. When injected intravenously it causes a fall in pressure corresponding to the amount received and its disappearance from the blood seems to occur *pari passu* with the rise of pressure to the normal. The short retention of formaldehyd in the blood partly explains this failure to benefit cases of sepsis and tuberculosis. Any reported benefit following intravenous injection must be attributed, as commonly accepted, to the saline given with it. After absorption there is a slight, temporary stimulation of respiration and a cardiac depression which soon return to normal. After large doses and to some extent after small ones, it causes edema and only after large doses do we find anything like the marked inflammatory changes recorded by Fischer. As expected we find formaldehyd in the body in the same places as we find hexamethylenamin but not so widely distributed. It is excreted mainly in the urine, gastro-intestinal tract and by the lungs. Bayer's theory that the formation of sugar in plants is due to a condensation of formaldehyd into dextrose is not credited by the author. He finds no facts in favor of its internal use and no special affinity for bacteria. Within the body the evidence favors the opinion that it preferably unites with dead material or inorganic bodies. It neither exercises any selective action on invading organisms nor stimulates protective mechanism so far as has been shown. Recovery from inflammatory reactions may be apparently complete. It causes a stimulation of the intestinal movements, with large doses extreme. He concludes that the antiseptic action of formaldehyd is apparently due to fatigue, exhaustion, and a final firm combination with the drug and there is nothing to indicate its usefulness in medicine other than for local use.

ASTHMA

B. C. DAVIES, Monrovia, Cal. (*Journal A. M. A.*, March 28), rejects the older classifications of asthma and even the more recent one of intracardiac and bronchial asthma, and considers it only as a reflex acting on the innervation of the circular muscular fibers from irritation in other parts of the body causing hyperemia of the bronchial mucosa spasm of the muscular fibers, and also of the diaphragm. He quotes cases supporting these views in which the asthma was due to gastro-intestinal disorders, adenoids and nasal troubles, genito-urinary irritation, etc., and was relieved or cured by treatment of the causal conditions. He suggests, reasoning from his own experience, that asthma be no longer considered a disease entity but as a reflex symptom. The examination in these cases should be complete and exact. The treatment very often lies in preventing the attacks, hence it is in the hands of the patients to a large extent and they should receive full instruction as to its cause and prevention.

DUODENAL ULCER

R. D. CARMAN, Rochester, Minn. (*Journal A. M. A.*, March 28), remarks on the frequency of duodenal ulcer which he has come to realize from radiologic examinations and from following the cases to operation. At present, he says, the diagnosis depends chiefly on the anamnesis and after this the Roentgen ray is the most important. The chief roentgenologic signs of duodenal ulcer, according to him, are, first, gastric hyperperistalsis, which he specially considers in his paper. After this comes a residue in the stomach and sometimes in the duodenum after six hours, if there be an obstruction from scar contraction and third, a diverticulum of perforating ulcer. The minor signs are: gastric hypermotility and hypertonus; irregularities in outline of the cap or bulb, or of the duodenum; lagging of bismuth in the duodenum; a pressure-tender point over the duodenum and spasms of the stomach. The technic of eliciting these signs is varied and their routine method at Rochester is to give 2 ounces of pure barium sulphate in the morning after purgation with castor oil the previous evening. The barium sulphate is given in breakfast cereal and the fluoroscopic examination is made six hours later in which the patient is first given 2 ounces of bismuth subcarbonate in 6 ounces of water, then 2 ounces of the same in 16 ounces of potato starch pap. The plates were made at once after screen examination and subsequently at intervals if desired. His special stress is laid in this paper on gastric hyperperistalsis which requires no external stimulation to induce it and is more permanent than that from massage of the epigastrium, though it may be intermittent. The cause of this intermittence deserves further investigation. The other two signs, especially the six hours' residue, are important but the diverticulum sign is comparatively rare, though rather decisively diagnostic when found. The minor signs are of less importance. The combination of hyperperistalsis and six-hour residue or a diverticulum in an otherwise normal stomach constitute about the only evidence on which a purely radiologic diagnosis of duodenal ulcer may safely be made. The article is illustrated.

PARESIS

A preliminary report on the treatment of paresis with salvarsanized serum, according to the method of Swift and Ellis, is given by J. A. CUTTING and C. W. MACK, Agnew, Cal. (*Journal A. M. A.*, March 21). An endeavor was made to select early cases as far as possible, but the earliest one in their series was of five months duration. The injections were given at intervals of two weeks until each patient had received three treatments. Seven cases in all are reported and discussed with tables of the cerebrospinal examinations and the Wassermann reactions before treatment and the findings at the time of the third injection and again four weeks later. The neurologic findings show no marked alteration following the treatment, and the review of the mental symptoms is not very encouraging. In one case, however, there was considerable improvement and this case also showed the greatest reduction in the cell-count. The blood Wassermann reaction was altered in two cases. The fluid Wassermann remained stationary in all and the Noguchi's butyric acid test remained positive in all. No definite conclusions are drawn from the results of the study, but the paper is offered in the hope that it may add some evidence as to the value of the treatment. Salvarsan was used in all the cases.

TEMPERATUR IN TUBERCULOSIS

An anomaly in temperature curve and pulse-wave not described in any text-book consulted and very little mentioned in the literature of tuberculosis is described by JOHN RITTER, Chicago (*Journal A. M. A.*, March 21), as follows: "If in a slightly advanced tuberculous subject the pulse-wave and temperature-curve are very carefully observed in the early morning immediately on rising, always in the sitting posture, these observations minutely noted, and the patient then directed to proceed to make the necessary preparations for dressing, such as brushing the teeth, shaving, washing, combing the hair, then dressing, all of which should consume about thirty minutes, and then asked to sit down and the pulse and temperature again carefully taken, one will observe that the pulse has increased in frequency from ten to twelve beats, but that the temperature has dropped correspondingly from 0.2 to 0.6 degrees." As a control to these findings, he obtained the early morning temperature of a number of nurses and medical students, taking a second observation about thirty minutes after the first, both very carefully and accurately taken daily for one week, the subjects being presumably in normal health. In every case a slight increase from one to four beats was noted, but no change in temperature. He also has had the patients make the observations for him, and some of them have called particular attention to the phenomenon in their own cases. In looking over the literature of the last few years he has found but a single reference to this symptom. A careful study might show it to be of great diagnostic value, not only in moderately advanced cases, but more particularly in early or suspected cases. It would be necessary for a great many of these observations to be made for a long time and through the course of the disease and compared with the temperature curves of the perfectly healthy.

VAGINAL HYSTEROTOMY

A. E. HERTZLER, Kansas City, Mo. (*Journal A. M. A.*, March 21), recalls the fact that some years ago he described a method of abdominal hysterotomy in which a nearly bloodless field was secured by temporary compression of the ovarian and uterine arteries by clamps. At that time he had already employed incisions which are here described when vaginal operations were in progress but he has found that he was not using a new principle as he then thought. His present technic is thus described: "The cervix is grasped on each side with tenaculum forceps and drawn down toward the vulva. A transverse incision is made in the anterior culdesac. The bladder is then freely raised from the uterus. The cervix is now split up to or slightly beyond the internal os, and the fundus is brought out into the vulva. It is well at this point to take a preliminary survey in order to determine the probable further requirements of the case. Often a lesion in the direct line of the incision is seen and the incision may then be extended to meet the conditions present. For instance, in case there is a submucous fibroid or a polyp the base of the tumor is circumscribed by the incision. When the lesion is diffuse, as in polypoid endometritis, a curet may be employed; but ordinarily when a lesion has been persistent enough to demand hysterotomy, complete excision of the affected area is better than curettage. This is particularly true if the patient is at or near the menopause. When the lesion has been excised, the remaining portion of the uterus is united by sutures. If possible, the knots should be placed inside the uterine cavity so that there may be as smooth a surface as possible when the fundus is replaced in the abdominal cavity. When the suture line has been placed as far as the internal os the fundus is returned to the abdominal cavity. The suture is then completed so as to unite the vaginal portion of the cervix and restore the incision in the culdesac. If so much of the fundus is removed that subsequent pregnancy would be unsafe, a portion of the tubes must be excised. If the portion of the fundus removed includes the insertion of the tubes, the free end of the broad ligament must be united to the remaining portion of the uterus in such a way that the tubes do not reach the cavity of the uterus, lest pregnancy take place. The extent of the uterus to be excised is determined by the extent of the lesion present. In idiopathic hemorrhage or diffuse polypoid endometritis at the menopause it may be desirable to excise the entire body of the uterus down to the internal os. In this way a supravaginal amputation by vagina is done." After excision of the diseased part if the broad ligament is involved its free ends are brought together and attached to the stump remaining. The special usefulness of the operation as described is claimed to be for tumor within the uterus. It permits excision at the point of attachment and removal of the tumor without pulling it across the abdominal cavity. Where malignancy is suspected it should replace the curet. The diagnosis can be made under the eye and dissemination of neglected malignant growths be prevented. It is a perfectly safe operation and with careful coaptation leaves a firm uterine wall. Two of his patients thus operated on have passed through normal pregnancies. In case cystocele, descensus or retroflexion coexist in a patient past the menopause or when sterilization is otherwise indicated, the Freund-Wertheim operation may be added with advantage. The article is illustrated.

CROTALIN .

Rattlesnake venom, recommended by Spangler in 1910 for epilepsy, has been examined by J. F. ANDERSON, director of the Hygienic Laboratory, Washington, D. C., who reports a fatal case in which it was used (*Journal A. M. A.*, March 21). Since Spangler's paper there have appeared reports of its use for other conditions, including tuberculosis, all based on purely empiric grounds. Anderson points out that a sterile solution cannot well be assured. Spangler himself says that the patients vary greatly as regards the swelling, erythema, and cellulitis produced by the injection of rattlesnake venom and this Anderson is inclined to attribute more to lack of uniformity in the remedy than to varying susceptibility on the part of the patient. A severe local reaction, he says, is more likely to make a more profound psychic impression, to invite secondary infection and especially to favor the growth in the tissues of certain anaerobic bacteria such as are found in the fatal case he reports. Weir Mitchell many years ago pointed out the great possibility of a secondary infection in a survivor in acute rattlesnake poisoning and also called attention to the rapid decomposition following death from snake poison. Welch and Ewing in 1896 showed that rattlesnake venom almost completely destroys the bactericidal properties of the blood and this has been confirmed later by Flexner and Noguchi. The laboratory findings in the case reported left no reasonable doubt that the death was due to the presence in the crotalin solution of pathogenic bacteria which were also shown to be present in the other ampules in the same lot as those used. The hygienic laboratory has taken up the examination of samples of crotalin solution and tablets. Anderson says: "Summarizing the results of the cultural work with the samples of crotalin solution, it is sufficient to state that there were tested for sterility ninety-five ampules of crotalin solution, prepared by four different firms, thirty-five of which (38.8 per cent.), were found not to be sterile. It is proper to state that in the great majority of instances the contamination of the crotalin was found to be with anaerobic organisms, and to all appearances usually with a certain anaerobic bacillus." Every tablet (twelve) examined was found not sterile and while more than one organism was present an anaerobic bacillus was found in every one. The tests for rattlesnake venom was made by inoculation of guinea-pigs and in every sample it was found present. It may be accepted that a dried venom contains a greater or lesser number of bacteria and cultural tests may not always detect them. Added to this we have the favorable condition for their growths in the local necrosis produced. Considering the many morbid conditions for which crotalin has been suggested, he thinks it is possible inherent dangers should demand the utmost caution in its use.

BLOOD TRANSFUSION

E. LINDEMANN, New York (*Journal A. M. A.*, March 28), gives an analysis of 135 transfusions made by the syringe cannula method in a large number of diseases, anemia, hemophyilia, hemorrhages from various causes, etc. The ages of the patients ranged from 6 months to between 70 and 80 years. There were 243 cannula insertions in the veins and the largest amount transfused at one sitting was 2,000 c.c. from two

donors. The largest quantity from one person at one sitting was 1260 c.c. and there were numerous donors who gave from 900 to 1,000 c.c. The recuperative power of a healthy donor is remarkable. While reaction from a blood-transfusion from a near relative is generally least, in many cases alien blood is equally congenial. As regards blood-tests before transfusion. Lindemann's view has always been that unless the serologic report is respected it is useless to perform the test. In the large number of donors tested a certain number of incompatibilities were discovered and eliminated. Laboratory work unless well done is worthless and it has its limitations in any case. Only once, however, in this series did the laboratory fail. One case is reported and a number of tables are given in the article. Lindemann says, "Not only is blood-transfusion a matter requiring skill, but problems in pathology, physiology, serology, immunity, chemistry and clinical medicine also constantly arise that require special study. Every large hospital in which such work is done should have on the attending staff a hematologist who can give to such work the degree of specialization necessary to meet the many problems and direct the work. A waste of good blood may be prevented and applications seen that might otherwise be overlooked."

SYPHILIS DIAGNOSED AS DIPHTHERIA

A case of syphilitic sore throat seen while diphtheria cases were in the community and giving rise to a white membrane in the throat, diagnosed as diphtheria, is reported by E. L. GLAZE, Athens, Ala. (*Journal A. M. A.*, March 28). Antidiphtheritic treatment was employed and the eruption that followed was attributed to the antitoxin; the result was a specially malignant case of syphilis. The case is reported on account of the mistake in diagnosis and in not promptly revealing the true nature of the disease in time. It also shows the importance of more thorough examination of all cases.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since the publication of New and Nonofficial Remedies, 1914, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

SCARLATINA STREPTO-SEROBACTERIN, MULFORD (IMMUNIZING).—A sensitized scarlatina streptococci vaccine, sold in packages containing three doses of killed sensitized streptococci. (The Council has at present no means for determining the identity and purity of serobacterins and these must therefore be used on the guarantee of the manufacturer, alone) (*Jour. A. M. A.*, April 11, 1914, p. 1168).

PHENOLPHTHALEIN-AGAR. — Phenolphthalein-agar is agar-agar impregnated with phenolphthalein, 100 gm. containing 3 gm. of phenolphthalein. It has the properties of agar-agar augmented by those of phenolphthalein. The Reinschild Chemical Co., New York (*Jour. A. M. A.*, April 11, 1914, p. 1168).

CAUSTICKS (SILVER NITRATE 75 PER CENT.).—Wooden sticks 1½ inches long, tipped with a mixture of silver nitrate 75 per cent. and potassium nitrate 25 per cent. Each stick is to be used but once. Antiseptic Supply Co., New York.

CAUSTICK APPLICATORS (SILVER NITRATE 75 PER CENT.).—Wooden sticks $6\frac{1}{2}$ inches long, tipped with a mixture of silver nitrate 75 per cent. and potassium nitrate 25 per cent. Each stick is to be used but once. Antiseptic Supply Co., New York.

CUPRICSTICKS (COPPER SULPHATE 60 PER CENT.).—Wooden sticks $1\frac{1}{2}$ inches long, tipped with a mixture of copper sulphate 60 per cent., alum 25 per cent. and potassium nitrate 15 per cent. Each stick is to be used but once. Antiseptic Supply Co., New York.

STYPSTICKS (ALUM 75 PER CENT.).—Wooden sticks $1\frac{1}{2}$ inches long, tipped with a mixture of alum 75 per cent. and potassium nitrate 25 per cent. Each stick to be used but once. Antiseptic Supply Co., New York (*Jour. A. M. A.*, April 25, 1914, p. 1328).

PROPAGANDA FOR REFORM

THEOBROMIN SODIUM SALICYLATE VERSUS "DIURETIN."—Theobromin sodium salicylate, now described in New and Nonofficial Remedies and sold by most pharmaceutical firms, was first introduced under the therapeutically suggestive name "Diuretin." While under its proper title it can be bought for thirty-five to forty-five cents an ounce, the proprietary "Diuretin" costs \$1.75 an ounce. An examination in the A. M. A. Chemical Laboratory has demonstrated that the quality of the product as sold under its chemical name is equal to that sold as "Diuretin." In view of these findings physicians should learn to prescribe the drug by its chemical name (*Jour. A. M. A.*, April 4, 1914, p. 1108).

TONSILINE.—Newspaper advertisements assert that Tonsiline is "A quick, safe, soothing, healing antiseptic cure for sore throat." From an analysis made in the A. M. A. Chemical Laboratory it appears that a preparation like Tonsiline will be obtained by mixing 1 ounce of tincture of ferric chlorid, 1 ounce alcohol, 280 grains potassium chlorate with sufficient water to make one pint. It contains drugs whose use for the purposes for which Tonsiline is used are being abandoned. The objection to the indiscriminate use of Tonsiline, which represents a saturated solution of potassium chlorate, is evident (*Jour. A. M. A.*, April 4, 1914, p. 1109).

GOMENOL.—Gomenol is a volatile oil which comes as a proprietary from France. The oil appears to be prepared from a plant closely related to that which yields oil of cajuput and the properties and therapeutic value of the two oils probably are about the same. Gomenol is sold under most extravagant claims (*Jour. A. M. A.*, April 4, 1914, p. 1110).

THE VALUE OF MINERAL WATERS.—The unprejudiced physician who is seeking to avail himself of the best therapeutic acids which modern medical science affords, cannot help being baffled by the conflicting claims made by the crude balneotherapy of to-day. He sees numerous cases in which relief has unquestionably been obtained by patients who have visited one of the many springs in this country or Europe; but when he attempts to analyze the possibilities—including rest, change of diet and environment—and to determine some standard by which he may intelligently advise those who need his help, the result is a hopeless confusion of ridiculous claims. At present mineral water therapy is a hopeless confusion (*Jour. A. M. A.*, April 4, 1914, p. 1097).

THE SERUM TREATMENT OF TETANUS.—The great value of antitetanus serum as a preventive is unquestioned. As a specific cure the serum has fallen short of expectation; nevertheless, it has decreased the mortality from tetanus. Tetanus antitoxin acts only on the toxin not yet combined with the nerve cells. This emphasizes the early and liberal use of antitoxic serum largely by intraspinal introduction in order to

neutralize the toxin that still is free and on its way to the nerve-cells, the necessity of thorough cleansing of the wound to remove all source of continued intoxication, and of conserving the strength of the patient in the hope that the morbid process caused by the toxin already in the nerve-cells may be overcome (*Jour. A. M. A.*, April 11, 1914, p. 1174).

SALVARSAN THERAPY.—Wechselmann holds that the cases of salvarsan fatalities from encephalitis hemorrhagica were due to uremia, resulting from the irritation of the kidneys, in most cases damaged by administration of mercury. On the basis of this theory he argues for a pure salvarsan therapy in place of the generally combined mercury and arsenic treatment. He warns that salvarsan should be administered only after due consideration of the dose indicated and of the determination of absence of contra-indications. No one can dispute that nearly all the deaths from salvarsan have been caused by its indiscriminate use, either in the face of contra-indications or too large or too frequent dosage (*Jour. A. M. A.*, April 11, 1914, p. 1175).

WINE OF CARDUI.—Wine of Cardui has vogue among women who prefer to take their booze in the form of "patent medicines." It is sold by the Chattanooga Medicine Company. John A. Patten, reputed to be the chief owner, is prominent in the Methodist Episcopal Church organization. Wine of Cardui is advertised as a cure for all manners of female diseases and though containing 20 per cent. of alcohol, women and girls are advised to use it indiscriminately. Examination in the A. M. A. Chemical Laboratory makes it probable that Wine of Cardui is a hydro-alcoholic extract of blessed thistle, containing a trace of valerian and that its medicinal properties are due principally to its alcohol content—20.36 per cent. absolute alcohol by volume having been found (*Jour. A. M. A.*, April 11, 1914, p. 1186).

URODONAL, A FRENCH PROPRIETARY.—Urodonal, which has been widely exploited in France, is said to contain lysidin, sidonal and hexamethylenamin along with other things and to have a uric acid solvent power thirty-seven times greater than that of lithia. As Urodonal is not to be found in New and Nonofficial Remedies, as the uric acid solvent powers of the three chief constituents are generally considered to be slight and as the solvent powers of lithium salts for uric acid are admitted to be practically nil, the extravagant claims for the new shot-gun proprietary do not inspire confidence (*JOUR. MO. STATE MED. ASSN.*, April, 1914).

HYPEROL.—Hyperol is exploited by the Purdue Frederick Company as "A Utero-Ovarian Corrective and Tonic" and is asserted to be "Indicated in all functional diseases of women." It is claimed to contain hydrastin, aloin, iron salts, apiol and ergotin. A report of the Council on Pharmacy and Chemistry announces that Hyperol conflicts with the following rules of the Council: Rule 4, in that statements on the label and in the circular enclosed with the trade package advertise it to the public in the treatment of diseases; Rule 6, in that exaggerated and unwarranted claims are made for its therapeutic qualities; Rule 8, in that the name of this pharmaceutical mixture fails to disclose the potent constituents, and Rule 10, in that it is unscientific. The mixture is as unscientific as it is unnecessary. It cannot be adapted to any individual case; when ergot is indicated, apiol would naturally be contra-indicated; if aloes is appropriate, hydrastis may defeat the object sought. It is unnecessary because no intelligent physician would prescribe such a combination of drugs in any given case (*Jour. A. M. A.*, April 18, 1914, p. 1271).

FRIEDMANN VACCINE.—Referring to the exploitation of Friedmann's vaccine by Ex-Mayor Rose of Milwaukee, the *Southern Medical Journal* suggests that "Mr. Rose will be remembered by Alabama physicians as the apostle from the city made famous by certain brews of beer, who a few years ago came into our state to instruct from the public platform our people regarding the health-giving properties of alcoholic beverages. He is probably prompted by the same philanthropic impulses when he attempts to inform physicians and the public of the 'miraculous results' of the serum that made Friedmann famous as well as rich" (*Jour. A. M. A.*, April 18, 1914, p. 1274).

FRIEDMANN AND THE NEWSPAPERS.—The officers of the Society of German Sanatorium Physicians protest against New York newspaper accounts which made it appear that their society had feasted Friedmann and endorsed his cure. Those who, incidental to a meeting of the society, inspected the Friedmann Institute were of the opinion that the cases under observation had been badly observed and as a whole could not be considered as successes or cures (*Jour. A. M. A.*, April 18, 1914, p. 1273).

PEARL LA SAGE COMPLEXION TREATMENT.—Pearl La Sage, Chicago, sells a beauty treatment by mail which is claimed "heals, soothes, cleanses, softens and beautifies the skin" and removes all kinds of blemishes. The treatment consists of tablets, capsules and laxative pills. The contents of the capsules and the tablets are to be dissolved in water and splashed on the face, one at night and the other in the morning. Examination in the A. M. A. Chemical Laboratory showed the capsules and the tablets to contain as essential constituents, phenolphthalein, borax and sodium carbonate. The pills appeared to contain cascara or some other similar drug and a little alkaloid, probably strychnin (*Jour. A. M. A.*, April 25, 1914, p. 1345).

THE HYPOPHOSPHITE FALLACY.—The hypophosphites were introduced by Dr. Churchill as a specific remedy for consumption on the theory, since proven incorrect, that phthisis was due to a lack of oxygen in the tissues. On the supposition that hypophosphites were oxidized in the body, he presumed them to be a source of energy for the nervous system. Not only does the evidence indicate that in consumption there is an increase of oxidation, but there is no evidence that phosphorus acts as an energizer of oxidation, and, further, there is no proof that the hypophosphites enter into general metabolism. Not only is there no evidence of the utility of hypophosphites, but it has long ago been demonstrated that they are excreted unchanged. While the discredited hypophosphate theory is no longer contained in text-books, the fallacy is kept alive by proprietary interests, and physicians who depend for their therapeutics on the "literature" of proprietary concerns still employ the hypophosphites (*Jour. A. M. A.*, April 25, 1914, p. 1346).

DUKET'S CONSUMPTION CURE.—The backers of the Chicago exploitation of the Duket consumption "cure" now admit that the treatment is without merit, that it is vastly inferior to approved systems of treatment of pulmonary tuberculosis and that the treatment may lead to albuminuria. While the "cure" was given wide publicity through the newspapers, the public has not been informed of the unfavorable findings (*Jour. A. M. A.*, April 25, 1914, p. 1347).

RADIO-ACTIVE WATERS.—Waters whose radio-activity is due, not to radium itself, but to radium emanations will quickly lose their activity. As most radio-active waters owe their activity to radium emanations, they must be used at the springs (*Jour. A. M. A.*, April 25, 1914, p. 1348).

BOOK REVIEWS

DISEASES AND DEFORMITIES OF THE FOOT. By John Joseph Nutt, B.L., M.D., Surgeon-in-Chief, New York State Hospital for the Care of Crippled and Deformed Children; Surgeon, Sea Breeze Hospital; Assistant Attending Surgeon, in Charge of Orthopedic Cases, Willard Parker Hospital; Member of the American Orthopedic Association. Illustrated. E. B. Treat & Co., Publishers, New York, 1913. Cloth; pages, 293; price, \$2.75.

There can be no question but that the average practitioner pays too little attention to the every-day disabilities of the feet, and any work which will present to him, in a brief yet concise way, the essentials of such disabilities and the treatment thereof, should find a hearty welcome in his library. If medical men more generally would give attention to some of these seemingly minor ailments there would be fewer feet infected and deformed by chiropodists, meddling cobbler, and brace fitters. Again, many of the so-called cases of rheumatism of the feet would, upon more thorough study, resolve themselves into actual anatomical derangements which would be quite amenable to successful treatment along mechanical lines instead of running the gauntlet of various doctors and the indiscriminate administration of salicylates and nauseam.

Exception might be taken in several places to the author's discussion of the subject of weak and flat feet. In the first place he does not lay sufficient emphasis on the necessity of maintaining the vertical axis of the normal astragalo-calcaneoid articulation. Did he do so he would not be found occupying such an indifferent attitude regarding the use of arch supports, which notoriously fail in restoring this vertical diameter, and indeed produce still further angulation of such axis. It is well recognized, of course, that such supports may afford temporary relief, but they are in no wise curative and in the estimation of the reviewer should find no place in the therapy recommended by a text-book dealing with this subject. Again, the method of strapping a weak foot, described and illustrated by the author, is far inferior to the splint woven from adhesive plaster, as advised by Edward Ochsner. On the whole, however, one should be grateful for as concise a text-book on a subject which is encountered every day, and up until the very recent past has been grossly neglected by the general practitioner.

ANATOMY, DESCRIPTIVE AND APPLIED. By Henry Gray, F.R.S., Fellow of the Royal College of Surgeons; lecturer on Anatomy at St. George's Hospital Medical School, London. New (American) edition, thoroughly revised and reedited, with the Ordinary Terminology followed by the Basle Anatomical Nomenclature, by Edward Anthony Spitzka, M.D., Director of the Daniel Baugh Institute of Anatomy and Professor of General Anatomy in the Jefferson Medical College of Philadelphia. Imperial octavo, 1502 pages, with 1225 large and elaborate engravings. Cloth, \$6.00, net; leather, \$7.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1913.

In attempting to review so standard a text-book on as fixed a subject as Gray's Anatomy one finds himself at a loss to add much to that already known of the work that occupies so enviable a position as this one. Naturally, there can be no very great advancements or changes in the study of anatomy, but in

recognition of the signs of the times, in this edition, the use has been made of the Basle Anatomical Nomenclature, the B.N.A. terms having been introduced in parenthesis following the ordinary terminology.

For this edition the whole work has been gone over critically and illustrations, many in colors, have been profusely utilized to meet the demands of modern anatomical teaching. Not the least adequate feature of the work is the very excellent index.

PROGRESSIVE MEDICINE. A QUARTERLY DIGEST OF ADVANCES, DISCOVERIES AND IMPROVEMENTS IN THE MEDICAL AND SURGICAL SCIENCES. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia, assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia, March 1, 1914. Owners and Publishers, Lea & Febiger, Philadelphia and New York. Six dollars per annum.

This number, as is usual for the March number, opens with the section on Surgery of the Head and Neck, by Frazier. His first topic for consideration is that of the pineal gland, about which there is relatively little information at hand as compared to the recently acquired knowledge of the hypophysis. Two of the most interesting discussions by Frazier are the treatment of trigeminal neuralgia by the injection of the Gasserian ganglion according to the method of Härtel, and the subject of cancer occurring in the areas covered by his review.

Müller in his section on Surgery of the Thorax discusses most interestingly the surgical treatment of pulmonary tuberculosis by the induction of artificial pneumothorax and gives a most creditable review of the indications, contraindications, accidents and results up to date.

There are many interesting features in Rührhah's section on Infectious Diseases among which are his plea for the necessity of trained public health officers and team work in the study of epidemic diseases. His review of the subject of diphtheria is quite exhaustive and presents many points of practical interest to the clinician. One very interesting observation made is that cases of diphtheria injected with antitoxin and presenting well marked serum reaction, as evidenced in the appearance of urticaria, are less apt to develop paralysis than cases not presenting such reaction.

One of the most interesting phases of Crandall's section on Pediatrics is his closing discussion on the carbohydrates in infant feeding.

Wood's section on Rhinology and Laryngology includes some interesting material on the tonsils and peritonsillar structures, and Duell's section on Otology, which closes the number, is characterized by a most excellent résumé on the subject of otosclerosis. He also calls attention to the scantiness of the literature concerning the presence of influenza bacilli in ear diseases, and mentions the fact that this organism probably paves the way for secondary infections by the streptococcus, staphylococcus, etc.

THE CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago, February, 1914; published bi-monthly by W. B. Saunders Company, Philadelphia and London. Paper. Price \$6.00 per annum.

While some of the cases referred to in this number have already been reported in past numbers of the Clinics in connection with the Clinical Congress of Surgeons last November, they are reported again as being a part of the record and because they show now further progress and more complete histories.

The first case, that of a fracture of the internal and external malleolus on a line with the tibioastragaloid articulation is a very practical presentation and contains some very valuable deductions for the general practitioner since injuries in this location are so very common.

The next case, one of ankylosis of hip, due to increase of bone on the rim of the acetabulum, as well as on the neck of the femur, is also most interesting. Dr. Murphy's operation arthroplasty, as applied to the hip, is here very beautifully illustrated and described.

Other interesting discussions in the number are those of Godlee on the subject of Lister and antiseptic surgery; Crile on nitrous oxid anesthesia, and Patterson on gastric ulcer and carcinoma.

MEDICAL AND SURGICAL REPORTS OF THE EPISCOPAL HOSPITAL, Philadelphia. Volume I. Cloth. Pages, 406. Press of Wm. J. Dornan, 1913.

This volume presents an unusual amount of material of both statistical and practical interest, being made up as it is not only of the hospital reports proper, but with an addition of a number of papers along clinical lines. Not a few of these have appeared in current medical literature, but perhaps a larger number are papers read before the Episcopal Hospital Clinical Society, at one time or another. One of the most interesting of these is an article by Piersol on the Clinical Significance of Extreme Degrees of High Blood-Pressure, with Remarks on Its Management. This article is one of the most clear-cut and concise resumé on the subject of hypertension that has recently appeared in medical literature, and itself makes the acquisition of the volume worth while. There are also some interesting papers on joints and bone work by Ashhurst, Alexander and others.

THE NATIONAL FORMULARY OF UNOFFICIAL PREPARATIONS. Third edition. Published by the American Pharmaceutical Association, Baltimore, Md.

As is well known, this is a book containing formularies constructed on rational principles with due regard to uniform composition and reliable effect. It is of the greatest importance that the members of the medical profession should be made acquainted with the existence, contents and object of this book, and, as stated by the author, it is confidently expected that they will consent to accept the preparations made in accordance with the formulae contained therein, instead of designating any special maker's product. In our judgment every doctor should possess a copy of the National Formulary, and if he will refer to it more often in prescribing for his patients there will be less occasion for patronizing the manufacturers of expensive and often times worthless proprietary preparations.

ROCHESTER AND THE MAYO CLINIC. By George Wiley Broome, M.D. Cloth, 160 pages. Price, \$1.10 postpaid. Shakespeare Press, New York, 1914.

We have read every word of this book, title page, preface, and even the accompanying advertising matter in which prospective purchasers are asked to send orders to any book store. We fail to find one redeeming feature in the book, and yet it is quite possible that our views concerning the propriety of attacking reputable men through the medium of a bound volume for public distribution are somewhat old fashioned. In short, there is absolutely no justification for the

cynical and caustic criticism of the Mayos because they happen to have succeeded in a professional as well as a commercial way. The author even takes undue occasion to score the editor of *The Journal of the American Medical Association*, though he loses no opportunity to laud himself and some of his personal friends. We have no hesitation in saying that the medical profession should be ashamed to claim as one of its members a man who presents such limited regard for professional ethics, has so little excuse for writing a book, and who produces a book that not only bears the earmarks of coming from a jealous, narrow-minded trouble-maker, but is so much out of harmony with all that makes for entertainment or usefulness.

THE PRACTICAL MEDICINE SERIES. Comprising Ten Volumes on the Year's Progress in Medicine and Surgery, under the general editorial charge of Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. VOL. IV GYNECOLOGY. Edited by Emilius C. Dudley, A.M., M.D., Professor of Gynecology, Northwestern University Medical School; Gynecologist to St. Luke's and Wesley Hospitals, Chicago, and Herbert M. Stowe, M.D., Associate in Gynecology, Northwestern University Medical School; Attending Obstetrician to Cook County Hospital. Series 1913. The Year Book Publishers, Chicago. Price, \$1.35.

Volume IV begins with some general principles of gynecology, under which are included questions of anesthesia, operative technique, organotherapy, etc. Under the second part, infections and allied disorders, one very practical conclusion drawn by the author is that local vaginal treatments are of little or no avail. Other parts of the work take up for consideration malformations and tumors, traumatisms, displacements and disorders of menstruation and sterility.

TEXT-BOOK OF PHYSIOLOGY. By Isaac Ott, A.M., M.D., Professor of Physiology in the Medico-Chirurgical College of Philadelphia, etc. 4th edition, revised and enlarged. 912 pages. Cloth \$3.50. F. A. Davis Company, publishers, Philadelphia, 1913.

The popularity of this work is attested by the demand for four editions. This last edition is illustrated with 434 half-tone and other engravings, many in colors. Plates showing the movements of the stomach and intestines in man by the roentgenkinematograph have been given and described in accordance with the latest observation of the Munich school. All of the latest facts in physiology have been recognized and many chapters in the book have been rewritten to conform to present-day knowledge on the subject. The book is a practical and up-to-date treatise for the use of the student and general practitioner, and it is decidedly free from discordant and hypothetical discussions and unsupported theories. The chapter pertaining to the internal secretions is especially good, as also the chapters on digestion and metabolism. Withal, the book is concise and excellent for the purpose intended.

ANATOMY AND PHYSIOLOGY FOR NURSES. By Amy E. Pope, Instructor in the School of Nursing of the Presbyterian Hospital of the City of New York. 135 illustrations. G. P. Putnam's Sons' New York and London. Price, \$1.75.

This little book gives more space to physiology and less to anatomy than most works of the kind, yet nothing of very great import to the nurse seems to have

been omitted. The chapters devoted to the physiology of the nervous system are particularly well handled, and in such a clear and concise manner as to leave little room for criticism. The book should find appreciation at the hands of nurses and teachers in training schools.

ESSENTIALS OF BACTERIOLOGY. By M. V. Ball, M.D., formerly Instructor in Bacteriology at the Philadelphia Polyclinic. Seventh edition, revised. Assisted by Paul G. Weston, M.D., Pathologist State Hospital for Insane at Warren, Pa. 12mo. of 321 pages, with 118 illustrations, some in colors. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$1 net.

While the average medical man may feel that he desires a more comprehensive work than a compend, yet we have no hesitation in saying that as a ready reference work containing the essentials of bacteriology, this little book is worthy of serious consideration. It is a handy, ready reference guide and will be found useful not alone to the student but to the general practitioner and laboratory worker. This latest or seventh edition incorporates all the newer established facts in bacteriology and has eliminated all that is obsolete and no longer in use.

TREATMENT OF CHRONIC LEG ULCERS, A PRACTICAL GUIDE TO ITS SYMPTOMATOLOGY, DIAGNOSIS AND TREATMENT. By Dr. Edward Adams. 122 pages. Cloth, \$1. Published by The International Journal of Surgery Co., 100 William Street, New York City.

This little treatise of 125 pages on chronic leg ulcers is certainly a happy thought. It embodies information that is hard to find in the ordinary text-books on surgery because it is usually scattered under different heads. It can be read at one sitting and is a complete exposition of the subject, therefore very satisfactory. Every practitioner should have a copy.

THE PRACTICAL MEDICINE SERIES, COMPRISING TEN VOLUMES ON THE YEAR'S PROGRESS IN MEDICINE AND SURGERY, under the general editorial charge of Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume V, PEDIATRICS, edited by Isaac A. Abt, M.D., Professor of Pediatrics, Northwestern University Medical School, Attending Physician Michael Reese Hospital. **ORTHOPEDIC SURGERY,** edited by John Ridlon, A.M., M.D., Professor of Orthopedic Surgery, Rush Medical College, with the collaboration of Charles A. Parker, M. D. Series 1913. Price, \$1.35. The Year Book Publishers, Chicago.

Dr. Abt opens his section on pediatrics by a consideration of diseases of the newborn and presents the practical conclusion in regard to hemorrhagic disease of the newly born that probably the most satisfactory treatment of this disease consists in the primary injection of whole blood to be followed by further injections of the serum from blood taken at the time of the first injection.

The most extensively treated subject is that on infant mortality, particularly as regards its etiology and prophylaxis.

The orthopedic section of the number represents the same conservatism that is characteristic of Ridlon's reviews, as is instanced by his rather slighting remarks concerning Goldthwaite's work on painful backs. In the opinion of the reviewer his discussion of the subject of weak feet is decidedly wanting in one or two respects, particularly in the use of arch supports, and the inadequate description of the proper shoe for the treatment of this disability.

CLINICAL DIAGNOSIS AND URINALYSIS. By James R. Arneill, A.B., M.D., Professor of Medicine and Clinical Medicine in the University of Colorado. New (2d) edition, revised and enlarged. 12mo., 270 pages, with 83 engravings and a colored plate. Cloth, \$1 net. The Medical Epitome Series. Lea & Febiger, publishers, Philadelphia and New York, 1914.

This is the second edition of an excellent laboratory monograph. In addition to the customary tests of the blood, stomach contents, feces, sputum and urine, space is found for such procedures as Wright's coagulation test, cryoscopy, tests for anemia, leukemia, trypanosomiasis and leukocytosis, Thalmann's gonococcus stain and spinal fluid tests for albumin and dextrose. The revision embodies all the recent advances. This work is worth many times its price to the student, the practitioner and the specialist alike.

DEVELOPMENT AND ANATOMY OF THE NASAL ACCESSORY SINUSES IN MAN. By Warren B. Davis, M.D., Corrima Borden Keen Research Fellow, Jefferson Medical College, Philadelphia. Octavo of 172 pages, with 57 original illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$3.50 net.

This is an excellent treatise bearing on the embryology and anatomy of the nasal accessory sinuses based on 290 lateral nasal walls showing the various stages and types of development from the sixtieth day of fetal life to advanced maturity. The information that is given throws new light on some points with which we have been imperfectly acquainted, and the author is to be congratulated on the care and minuteness with which the various changes are pictured in a large number of beautiful original illustrations. The work, while not appealing especially to the student or general practitioner, will be found a valuable addition to the library of the specialist and surgeon.

NEW AND NONOFFICIAL REMEDIES, 1914. 340 pages. Cloth 50 cents, paper 25 cents, postpaid. The American Medical Association, 535 North Dearborn Street, Chicago.

This book contains descriptions of the articles which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association prior to Jan. 1, 1914. The acceptance of the articles included in the book was based in part on evidence supplied by the manufacturer or his agent, and in part on an investigation made by or under the direction of the Council. The descriptions of preparations include the therapeutic uses and doses of all proprietary medicines which the Council has found worthy of recognition. Over 1,603 different remedies are described—many of these products representing significant advances in therapeutics. The present edition contains a list of references to proprietary and unofficial articles not admitted. The book should be on the desk of every practicing physician for the reason that a physician of discretion should know the character of the products he is asked to prescribe.

THE PATHOGENESIS OF SALVARSAN FATALITIES. By Dr. Wilhelm Wechselsmann, Directing Physician of the Dermatological Department, Rudolph Virchow Hospital in Berlin. Authorized translation by Clarence Martin, M.D. The Fleming-Smith Company, Medical Publishers, St. Louis, U. S. A. Price \$1.50.

Dr. Martin has done a distinct service to English-speaking physicians by translating this essay of Dr. Wechselsmann's. The author reviews the salvarsan fatalities which have been reported in sufficient detail

to be of value, and in which there is no question of technical error. He compares the clinical and pathologic findings in these cases with cases of acute arsenical poisonings and finds they do not agree. The older literature, for instance, does not mention hemorrhagic encephalitis in connection with acute arsenical poisoning. In practically all of the cases in which serious symptoms appeared or death occurred there were unmistakable signs of a very serious impaired kidney function. The conclusion arrived at is that the kidney is the organ at fault, while a very large clinical experience has convinced the author that with normal kidneys these serious results do not occur. Mercury experimentally and clinically is capable of injuring the kidney, particularly the tubular epithelium, while salvarsan, which is excreted by the kidney, seems to exert its deleterious influence on the glomerular structures. Dr. Wechselsmann found that practically all fatal cases of salvarsan therapy in strong healthy patients showed a combination of energetic mercurial treatment and the intravenous injection of salvarsan.

The book contains many very practical suggestions looking toward avoiding these unfortunate fatalities and it behooves every one who contemplates administering salvarsan to read the volume.

A TREATISE ON THE DISEASES OF WOMEN. For students and practitioners. By Palmer Findley, B.S., M.D., Professor of Gynecology, College of Medicine, State University of Nebraska; Gynecologist to the Clarkson Memorial Hospital and Douglas County Hospital; Fellow of the American Gynecological Society; Fellow of the American Association of Obstetricians and Gynecologists; Fellow of the Chicago Gynecological Society. Octavo, 954 pages, illustrated with 632 engravings in the text and 38 plates in colors and monochrome. Cloth, \$6 net. Lea & Febiger, Philadelphia and New York, 1913.

This work of Dr. Findley's is the outgrowth of his previous volume on *Diagnosis of Diseases of Women*, and represents the results of a close study of the work of other gynecologists, along with a rich observation of his own. It is one of those gynecologic texts which recognizes the close association between this particular branch and that of obstetrics and it is, perhaps, through such an association that a better diagnostic insight is afforded to many gynecologic conditions. One of the most excellent properties of the work is its abundance of illustrations, many of which are in color and most of which are very excellently done.

In criticism one might say that the author seems just a little over-enthusiastic in the use of so-called local treatment for pelvic conditions such as douches, tampons, etc., per vaginam. Then, too, his nomenclature of peritonitis as being "general," is at variance with the present conception of this disease. In places the diction is very clumsy and not a few typographical errors have found place, as, for instance, a dose of eserine being given in one place as 1/50 of a gram while in another it is 1/50 of a grain. Several such instances of loose proofreading were encountered. The reviewer is inclined to disagree with the author concerning the relief of pain afforded by x-ray therapy in inoperable carcinoma of the uterus, and knows of a few instances wherein surprisingly good results have accrued. Also the author's conservatism in refusing to intervene surgically until a period of three months have elapsed after acute infections of the tubes bids fair to lead to procrastination, resulting in decided discomfort to the patient.



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of Pediatrics, Harvard Medical School; Associate Visiting Physician, Children's Hospital and
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VOLUME VII

FORT WAYNE, IND., JUNE 15, 1914

NUMBER 6

ORIGINAL ARTICLES

VISCEROPTOSIS: SYMPTOMATOLOGY *

J. C. SEXTON, M.D.
RUSHVILLE, IND.

The attempt to sketch the symptomatology of visceroptosis is attended with many difficulties because the patients react so differently to the absorbed toxins. No matter how great the ptosis, nor of what variety, the patient will present no symptoms at all until gastric or intestinal stasis results. When there is retention of stomach contents only, the resulting symptoms will not be those that would occur in right-side ptosis of kidney and cecum, for instance. All the cases, however, are alike in suffering from auto-intoxication and carry a certain general train of symptoms indicative of such pathology and usually easily recognizable.

As one would naturally expect, the nervous system is first and usually the more markedly impressed as the toxin-laden blood bathes the brain-cells. Headaches are well-nigh universal in autotoxic patients. These are apt to be frequent and at times severe. The headache is worse of mornings, wearing away to a degree or disappearing after a few hours. In some of the cases the pain in the head is all but constant, and in one case which I operated for Dr. C. D. Humes the headaches actually incapacitated the patient from all her work. This diagnosis, by the way, was beautifully shown by bismuth photograph by Dr. A. M. Cole and confirmed at operation: for we found in this case that the stomach and transverse colon were both drawn down and bound down and obstructed by a dense omental adhe-

sion to the scar of a previous laparotomy. Stasis and auto-intoxication from adhesion obstruction must therefore not be overlooked, for at least 10 per cent. of so-called visceroptoses are of this nature.

Furthermore, there is a mental languor and mental apathy. It is pronounced in over half the cases. "Hebetude" of mind and melancholic tendencies. Cases have been cited in which suicide has been attempted. The nervous system runs the whole gamut of those freaky and ill-defined states which we designate as hysteria, or neurasthenia. We must always remember that both brain and body are poorly nourished and these patients present themselves as marked and habitual invalids.

Loss of appetite and loss of weight characterize all cases. Their fat is gone or greatly reduced. The fatty padding and supports have failed or else the ptosis would not have occurred. A study of the etiology readily reveals this. Cold hands and feet, feeble circulation, heart weakness and fatigue upon exertion. Nausea and vomiting is of especially striking occurrence in the cases of mid-line ptosis with the so-called fish-hook stomach. Vomiting of blood and pain after eating sometimes lead the very best diagnosticians into error, and cases have gone to operation under diagnosis of ulcer of the stomach.

All the patients are constipated and the constipation is incurable. A case is recorded in Coffey's extract of Chapple's study of Lane's cases in which the constipation persisted for twenty-eight days in spite of treatment. The colon is always found to be thinned and dilated. The muscular tissue atrophied. Inability to digest food and to properly assimilate food produces malnutrition of every organ and tissue of the body. Fermentation of both stomach and colon contents, distention of the abdomen, gas

* One of the papers composing a symposium on visceroptosis presented before the Indiana State Medical Association, at West Baden, September, 1913.

pains that are relieved by eructations or passage of flatus. One case particularly presented this symptom. She was a Sister of Charity that I saw with Dr. Clark and Dr. Cole. Our diagnosis and Dr. Cole's radiographs were beautifully confirmed at operation later.

Tenderness, soreness and stiffness of muscles and joints, general muscular pains and muscular atrophy characterize such cases. On the other hand, two of my well-pronounced cases were without general pain but complained greatly of pain in the abdominal muscles. All the patients as a rule have tenderness over different areas of the abdomen, notably in the right iliac region. Cecal distension, gas movements and gas cramps here give an impression of appendicitis; and twenty years ago Edebohls pointed out the anatomical relation between prolapsed kidney and chronic appendicitis. Failure of nutrition is also shown in the sallow and blotched appearance of the skin—discoloration about the face—under the eyes—also on the body, is reported as strikingly evident in most of the patients.

Marked changes are shown in the breasts, for the fat becomes lost about the glands and the breasts appear flattened and atrophied. Lane speaks of these changes in the breasts as similar to those usually described as chronic mastitis or cystic degeneration.

Strikingly marked is the body conformation of such patients. The flattened breasts, the sunken, narrow upper abdomen, then the pouching out of the lower abdomen at once impresses the observer as if all the organs in the abdomen were trying to get into the pelvis. This distinct physical formation occurs in 90 per cent. of cases of enteroptosis according to Stiller.

This is the briefest possible summary of the symptoms that may be looked for in patients suffering not from prolapsed viscera necessarily, but from loss of motility or mechanical obstruction to the onward passage of the contents of the stomach and intestine. Invalidism is due to food stasis and the resulting decomposition and chemical changes that follow food retention. Such a patient gets only limited nourishment from his food—for its improperly digested remnants evolve poisons that are absorbed into the blood.

This is the feature and picture and meaning of auto-intoxication—and presents different phases in different people and varies greatly at times in each individual as the toxic products vary in amount and intensity and as obstruction and atony advance.

VISCEROPTOSIS: THE X-RAY DIAGNOSIS *

ALBERT M. COLE, M.D.
INDIANAPOLIS

The x-ray diagnosis of visceroptosis has given some accuracy to a subject that, in many of its phases, has been hazy and misleading. This has been especially true of the gastro-intestinal tract. While the x-ray may be useful at times in ptosis of other organs, its great value is in gastrop-tosis and enteroptosis and I shall confine my paper and lantern slides to this phase of the subject.

Through the bismuth skiagram we are learning much of the normal, as well as the abnormal, in the digestive organs. It has changed and in some particulars revolutionized our conception of the size, shape, position and action of the stomach. We now know that the so-called normal stomach is not the stomach as seen in the dissecting-room or on the operating-table. It is not, as a rule, placed high in the abdomen as outlined in text-books, nor is it often of the crescentic shape, lying high horizontally across the epigastrium, as has been taught for years past. No organ differs so much in shape and position as has been revealed by the bismuth skiagram. Concerning the normal stomach, again, we have learned that a type of stomach, its shape and whether high or low, fits the type of patient in which it is found; that in robust individuals it is never found as low as in the asthenic, thin or anemic; but in nearly all it is much lower in the abdomen and more perpendicular than usually conceived. Again we have learned that healthy stomachs are never larger than their contents and that they differ most markedly in their peristalsis and time of emptying. We may, therefore, conclude that we have no normal type of stomach.

From the fact that so many stomachs are low, especially in the female, we should not consider any stomach abnormally low unless the greater curvature falls, when the person is erect, at least two to three inches below the umbilicus. We should also distinguish between a gastrop-tosis, without any falling of the pylorus (the so-called "water-trap" stomach), and those cases in which the pylorus and body of the stomach are both down. In the former we generally have a much more serious grade of symptoms because of the difficulty for the gastric contents to pass into the small bowel.

* One of the papers composing a symposium on visceroptosis presented before the Indiana State Medical Association, at West Baden, September, 1913.

The diagnosis of a general visceroptosis may be made in several different ways. If the patient is of the enteroptotic habitus one glance is enough to determine that there is present a visceroptosis. Physical methods, such as percussion, may be employed. With the stomach this is fairly accurate if this organ has previously been inflated with air. Ordinary percussion and palpation should never be relied on unless the stomach has been inflated. With the intestines no physical methods of diagnosis are reliable. Ordinarily when the stomach is down we expect to find the transverse colon also low, but the only sure means of arriving at a diagnosis of enteroptosis is by using the bismuth enema to fill the colon and skiagraph the patient standing. Likewise, we may fill the stomach with bismuth or barium and by this means arrive at a more accurate diagnosis than by any other method. The chief value, however, of the bismuth skiagram in both stomach and intestinal ptosis is the detection of many conditions other than ptosis—conditions which may be causative in producing the ptosis or may exist as complications and which very often give few or no symptoms that would point to this particular complication. I would lay particular emphasis on this point. I hold most strongly that it is not enough to stop with a diagnosis of general visceroptosis; to percuss the abdomen and tell the patients their viscera have dropped down and advise a support with a promise of probable relief. Such a diagnosis is unscientific and incomplete. These organs merit further study than this. In many there are definite causes for the ptosis and in many there are complications which demand careful study and the employment of the x-ray to arrive at any definite conclusions. Careful history, physical and blood examination, gastric and intestinal analysis, along with the exact findings, properly interpreted, of the bismuth skiagrams and fluoroscopic study should be employed in all moderate or extreme cases. This should be especially imperative where surgical measures are contemplated.

Again, I would repeat that in the majority of cases it is not merely a question of ptosed stomach and transverse colon with perhaps the kidney; the important fact is whether we have some complication or a possible organic disease, such as carcinoma or gastric or duodenal ulcer, or such condition present as pyloric adhesions from gall-bladder or appendix disease, pericolic membranes, kinks or stricture of the small bowel or colon, a mobile cecum, incompetency of the ileocecal valve, causing ileal stasis, loss of tone, as evidenced by weakened peristalsis and many minor

complications. Many of these diseased conditions may cause ptosis; many may exist as complications and give no definite symptoms, and in order to advise the proper treatment there must be an exact diagnosis. In the vast majority of cases x-ray study will reveal these complications, which may demand special treatment or surgical measures.

Visceroptosis is often complicated with abdominal stasis, about which we are hearing so much since Lane of England has brought it before the profession in this country. It is my personal belief that gastro-intestinal stasis is a subject of tremendous importance, and especially as it exists as a cause of the so-called auto-intoxication and neurasthenic conditions. Gastro-intestinal stasis is a frequent complication of visceroptosis. It may be purely mechanical from a dropping down of the abdominal organs, giving rise to a purely functional disturbance, or it may be organic, due to partial obstruction from pressure or a neoplasm of the digestive tract. The x-ray study of the passage of the bismuth meal will give us data regarding abdominal stasis that may be obtained in no other way. By repeated observations we follow the bismuth meal through the digestive tract and thus we may find stasis in the stomach, the first and second portion of the duodenum, the terminal ileum, the cecum or any part of the large bowel. When we find it, the question then arises whether it is due to a mechanical effect of ptosis or to organic disease. Generally a complete radiographical study will reveal the cause and site of stasis, and on these data a rational scheme of treatment may be advised.

Such accurate conclusions are within the reach of every physician. Some few patients may not be able to afford the expense, but it is their right to know that scientific means for the diagnosis of their case are available. Most patients will not object to an expenditure of time and money if they are persuaded that a complete examination is imperative before a proper treatment can be employed.

Aside from the accuracy and completeness which the x-ray diagnosis will insure, we must not lose sight of the influence on the patients themselves. Seeing is believing. To show a sceptical patient the skiagraph of a ptosed stomach and colon, with perhaps other conditions present, will certainly impress his mind, especially when surgery has been advised. No mere statement, even from a trusted physician, will clear up his doubts or exact compliance to a disagreeable treatment or surgical operation as

the actual picture of his trouble before his eyes.

As to the technic of x-ray diagnosis in abdominal adhesions, I shall not enter into that subject. It has been published many times. I wish to repeat what I have often said and written before, that the proper interpretation of the skiagraph findings and the x-ray plate is the most important factor of all.

I would further add that the x-ray findings must always be taken with the history and the chemical and physical examination.

The lantern slides, which will now be thrown on the screen, will best illustrate the possibilities of the x-ray diagnosis of visceroptosis.

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VISCEROPTOSIS: MEDICAL TREATMENT *

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There are two forms of enteroptosis, hereditary and acquired. It is necessary to keep in mind this fact in the treatment of these cases. Visceroptosis may be an expression of failure of development. Constitutional *minderwertigkeit*, which expresses itself in a variety of ways and which has stamped itself on the skeleton. The skeleton is uncommonly long, thin, thorax small, flat, habitus paralyticus named by the French, "thorax paralytique ou aplati." The shoulders abruptly sloping, dropping forward. There is anteroposterior flattening of the skeleton case, pointed epigastric arch, mobile ribs, especially the aorta decima fluctuans is joined by connective tissue instead of cartilage. Distance increased between xyphoid and symphysis pubes.

All of these signs are stigmata of degeneration and are of importance in the diagnosis and treatment of the various forms of ptosis of organs.

Many of our authorities indeed have approached the whole question from the pure mechanical standpoint. The French have especially taken the view that congenital misplacement of organs is a general disease and demonstrates that there is a "veritable infirmité physiologique de tissus insuffisance congénitale de tissus."

In common with many other diseases of development where the body shows the persistence of infantile type in the anatomic evidence of inferiority of the organism and the manifestations of

asthenia universalis congenita.

It is in exactly this type of cases that an early diagnosis is of importance because a wise physician can suggest much of importance to parents and teachers of these children. The nutrition of the body can be improved, muscles strengthened, the development of the skeleton aided and assisted by diet and physical culture. Many of the disastrous results of splanchnoptosis can either be prevented or so corrected as not to add to the *minderwertigkeit* of the individual.

It is of importance by proper gymnastic exercises to strengthen the external abdominal muscles so that the balance of tonus may preserve the intra-abdominal pressure in such a manner as to hold the organs in place.

That much may be done by physical culture has been abundantly proven by the cure of inguinal hernias by such methods. Hernias may be reduced and held in place by properly trained abdominal muscles; the same is true of gastro- and nephro-ptosis. A proper diet can also cure the abnormal leanness of many congenitally predisposed cases. I have in mind many cases where nephro-ptosis was cured by a diet which caused a considerable increase of weight. A kidney embedded in a large capsule of fat is never a loose kidney, and if this fat capsule is formed the symptomatic effects of the descensus are to a great degree corrected and the symptoms disappear.

To accomplish such notable results the physician must firmly establish his control over his patient. If the patient is a defective child, he must impress the parents with the importance of the measures undertaken for its relief. He must speak as one having authority, for the parents and patients are frequently neurasthenics, and must be impressed or the seeds of advice fall on unfavorable soil and nothing is done.

The influence of the various factors in the production of displacement of the kidneys is easily traced and since this is the displacement most easily studied, a few words might not be out of place.

The kidneys belong in a paravertebral niche in front of and beside the transverse processes of the vertebrae. When this groove is flattened by scoliosis, acquired or congenital, the kidneys easily slip down, especially if the abdominal walls are lax or the abdomen pendulous and the kidneys approach their embryological positions in the lower abdomen or even the hollow of the sacrum. The importance of maintaining the natural curvature of the spine by proper carriage

* One of the papers composing a symposium on visceroptosis presented before the Indiana State Medical Association, at West Baden, September, 1913.

of the body, clothing without stays, strong spinal muscles, liver and stomach in proper position, is evident. Especial care is demanded after operation for the removal of tumors, ascites, and also after pregnancies.

No one should follow the nonsensical fad of trying to place patients on their feet shortly after serious operations. They should rest in bed, otherwise the kidneys become movable under our eyes; common sense and experience should not be thrown away for the sake of an impression on the public.

In the habitus enteropticus the organs have the tendency to assume the longitudinal position and this tendency toward the vertical position is increased by lessened nutrition, hence when the individual loses weight or the abdominal walls become lax by repeated pregnancies, the symptoms due to change of the location of organs become more prominent.

Anemia, insufficient nourishment, neurasthenia and hysteria, all excesses in Baccho et Venere, disappointment in business, social troubles, and everything which lessens the general health and tone of the system can enter as a contributing factor to the anatomical displacement of organs and also be an active agent in the production of the symptomatology of digestive disorders dependent on ptosis. It would be impossible in the limits of a paper which one could read to enter on an elaborate discussion of all these causes and symptoms of enteroptosis and the means by which the physician can combat them, but the mere mention is suggestive of the wide field of medicine which is open to our view and the grasp on affairs which one must have to manage and relieve these patients.

In asthenic constitutions the interabdominal balance is disturbed and all the supports are relaxed by hydrostatic pressure if not counteracted by strong external abdominal walls, and the contents of the abdomen is driven downward.

It is also in exactly such constitutions where corsets and bands become the active agents by changing the form of the spine and conformation of the ribs to the habitus enteropticus. It is to the emphasis which Glénard placed on certain nervous disorders of the stomach and digestive tract that we owe the vast literature on enteroptosis and the habitus enteropticus.

The habitus enteropticus is atavism. The wide thorax of man has been of slow evolution and has developed since man assumed the upright posture. It is seldom that visceralptosis is present in an individual with a wide thorax. It is for this anatomical reason that measures developing

the chest are of vital importance to strengthen the constitution and furnish room for the organs of the upper abdomen.

Glénard's disease was the name at first applied to various forms of enteroptosis, but its meaning has been greatly extended.

Owing to the great nervous disturbance sometimes found in cases of visceroptosis, it was supposed by him that he had found a cause for many cases of neurasthenia, but the fact that many of these cases are without nervous symptoms shows that this rule is only a partial explanation. It has been supposed to be the cause of that symptom complex designated for want of a better term "nervous dyspepsia."

It is interesting to note that Charcot held exactly the opposite view. He held the loss of nerve tone to be the cause of organic displacements. This, at least, explains the descensus of abdominal organs following paralysis.

The old pathologist Rokitsansky observed that tubercular cases possessed a certain type of organization and that this type was frequently present in many members of the same family. This habitus was frequently connected with enteroptosis and best explains the fact of pre-tubercular dyspepsia.

We are just now beginning to understand the very important rôle played by the hypoplastic constitution. There is a definite anatomical reason in the habitus asthenicus for tuberculosis and the prolapse of abdominal organs. Virchow long ago connected the small heart and narrow vessels and hypoplastic vessels with ulcer ventriculi and chlorosis. Glénard demonstrated the direct anatomical connection of cholelithiasis with ptosis of the liver following child-birth.

Postpartum gall-stones is too common a history not to have been noticed by almost all men of any considerable clinical experience. That singular group of nervous symptoms described with remarkable clearness and grasp by Eppinger and Hess under the name of "Vagotonic," irritations of the vagus is frequently only an expression of digestive disorders with vagus phenomena produced by enteroptosis.

Certain it is that just as in vagotonic, atropin is the remedy par excellence, so it is also in esophagus spasms, obstipation, hyperacidity and intestinal irritations. The irritations of gastro and enteroptosis may be due to a disturbance of internal secretions which disturb the balance of the sympathetic and vagus systems which are antagonistic. The asthenic habitus is also somewhat protective against certain diseases, i. e., arterial sclerosis, apoplexy, angina pectoris, rheumatism, diabetes and nephritis.

We know from our daily observations that these diseases attack most commonly the robust

and obese and not the slender, weaker individuals who form the great bulk of the enteroptotic cases.

That the anatomic relations of enteroptosis can be changed by any form of medical treatment may be difficult of belief, but Noorden has claimed that the stomach has been lifted and to have shown this by x-ray pictures. His conclusions have not been accepted. The kidney certainly becomes fixed by the fattening cure, by the same means the condition of the nervous and digestive systems can be greatly improved.

It is a matter of common knowledge that women past the menopause become much more comfortable notwithstanding the continuance of visceroptosis. It becomes, therefore, a duty of the physician so to order the lives of these cases that they can glide comfortably into old age. It is well known that almost all persons past sixty years have some displacement of organs, but of this they seldom complain and usually the consultant discovers the fact while examining the case for some other disease. In dealing with these cases the problem in a general way is that of improvement of the constitution, judicious exercise, followed by rest. These patients must be well fed, especially in youth. Goethe said, "What thou hast inherited from thine ancestors, thou must win in order to possess."

Many enteroptotic women are indifferent to sufficient exercise, and therefore, suffer loss of appetite and muscular tone. Travel sometimes improves the physical and mental conditions of these patients. A patient too lazy to walk will be stimulated to exert herself by the novelties of sight-seeing and shopping.

Health resorts in the mountains may also prove of great benefit because of the stimulating air and the necessity of walking. The wholesomeness of example must be remembered. The swimming exercise indulged in at our beautiful lakes in Northern Indiana and at the seaside have a good influence on appetite and digestion.

Hysterical and irritable patients thus discharge their misdirected efforts in normal and natural occupations and sports.

The diet of these patients should be increased by giving food of much greater caloric value than is needed to maintain the body. They should be fattened after the S. Weir Mitchell plan or by forced feeding.

Without following any especial plan the diet should be liberally increased and five or six meals should be eaten daily. The dyspeptic symptoms will be increased by fattening foods, but if the weight is increasing, the physician should exert all his authority to have his orders obeyed. The end to be achieved is improved nutrition. The physician should not pay too much attention to the complaints of the patient; he should only

heed real symptoms like pain, diarrhea and vomiting. As the faulty metabolism of the patient is improved, many disagreeable symptoms will cease. The symptoms due to anemia and lack of nourishment will certainly be improved; with better blood organs improve in function. When this method fails a careful examination should be made for an organic cause, such as ulcer, stenosis or cancer.

These diseases of course demand different measures than are taken to correct the habitus asthenicus universalis congenita. Overwork and worry must be treated by a mixture of rest and play carefully advised by the physician.

The youth of these individuals is the most thankful field for our activities. The physician should be the trusted adviser of the family as to the schooling and occupations of the youth. If these individuals are to approach the normal type, the body must be developed and the nervous system must not be exhausted by long hours in the schoolroom. A healthy intellect is of much greater importance than hours spent in exhaustive study. These children should be encouraged to play and take part in sports to which they are indifferent by reason of their relatively feeble constitutions.

They should be early informed of the enervating effect of masturbation. The thoughts and efforts of the young should be directed to other than sexual matters. Boys take kindly to athletic exercises and sports which form a wholesome outlet for their activities. Girls can have the less violent sports. Tennis, croquet, golf, walking, horseback riding; these improve the digestion and appetite. This is a matter of importance because the improvement of the nutrition and strength of these individuals combat the development of enteroptosis.

A part of the treatment of these individuals is management of the neurasthenia. It is in these cases that the personality of the physician plays a great rôle. Suggestive therapeutics is of very great importance. Many methods of treatment must be carried out with great art and tact. The confidence of the physician must be transmitted to the nervous, doubting patient. The physician must guide these persons in right living.

Alcohol and narcotic drugs must never be given. They are also better off without stimulating drinks like tea and coffee.

Many of these patients do not bear a diet too full of meats; nitrogenous food seems to form in the intestines, substances which have an unfavorable influence on the nervous system. Fruits and vegetables are much better borne. This diet also aids in correcting the obstipation from which the patients frequently suffer.

Rest in bed after meals is of great value as digestion is performed with the organs in place.

Care of family physician of congenitally predisposed children before visceroptosis develops is of very great value in limiting or preventing ptosis of important organs. Great care for the nutrition of such children and the careful maintenance of the balance of meat and lacto vegetable diet.

Anemic girls must have beefsteak and eggs. They should live in rooms with plenty of sunshine and fresh air. They should have sports, turning and gymnastics, but in moderation until the muscles are hardened. The sports must not be too violent as the object is health and not the development of boxers or athletes. A proper tonus of the abdominal muscles is of great importance to prevent ptosis of organs. Care for the sexual habits of both sexes at puberty is important to prevent the exaggerated development of the prominent nervous features in these cases. Supports are most valuable when there is hanging or pendulous abdomen.

In cases of relaxed and pendulous abdomen they may give great comfort to these patients.

The proper application of the zinc oxide plaster is a very excellent form of bandage. A good plaster bandage is made by Beierdorf of Hamburg and is called Enterphor. This relieves the pull on the plexus coeliacus. The constipation is to be relieved by massage, exercise and diet, to which may be added the use of laxatives when necessary. The alkaline waters such as Vichy are valuable, but Rochelle salt is cheaper and more effective, combining as it does simple laxative properties often of much benefit. A visit to the mineral springs of Indiana once or twice a year for two weeks is often of great benefit.

Arsenic and iron, which might be thought to be indicated in the case of chlorotic young girls, often defeat their purpose by the gastro-intestinal irritation produced, which forbid their administration for any great length of time.

The end sought is much better attained as a rule by food, alkaline waters and bitter tonics which improve the appetite and stimulate the digestive organs. The bitter tonics of greatest value are strychnin, gentian and hydrastis. They are the type and perhaps the most valuable, but not the only tonics of value.

These patients are frequently neurasthenics and, therefore, demand the greatest tact for their successful management. They demand much time and care from the physician and also great skill and experience. It is a great good fortune if they are well-to-do, so that they can travel, visit resorts and take good care of their bodies and minds, otherwise they are likely to be a burden on their friends and a charge on the public institutions.

VISCEROPTOSIS: SURGICAL TREATMENT *

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The study of visceroptosis has interested the clinician since Glenard's first description of the condition, and through clinical studies and at the operating-table, and finally the x-ray, has made it possible to determine the position of the abdominal organs with considerable accuracy. It is possible to diagnose kinks and partial and complete obstruction. When these troubles are found and the patient becomes a chronic invalid, and well-directed medical treatment fails to relieve, an operation is indicated. I do not mean in presence of definite obstructions, or mechanical hinderances, we are to wait until the patient is exhausted by chronic toxemia; on the contrary, operation should be done as soon as it is demonstrated that there is a distinct mechanical cause for the trouble. This diagnosis, however, requires the best diagnostic training. There may be great displacement of viscera without serious disturbance of functions.

The x-ray shows all displacements so plainly that one must be guarded in drawing conclusions. I have seen the pylorus in the left ileac region and the entire transverse colon in the pelvis in patients whose digestion and bowel movements were fairly good. It is only in those cases in which we find the displacement with symptoms which show that normal functions of the alimentary canal are seriously disturbed that an operation is to be recommended.

The symptoms are chiefly due to intestinal stasis. These patients suffer with severe and frequent headaches, attacks of nausea and vomiting, loss of appetite, nervousness, cold hands and feet, nervous depression and mental apathy, persistent constipation (which resists all dietetic treatment), abdominal distention and pains, which are relieved by belching or passage of gas, muscular pains, loss of strength and energy. (Coffee.) All of these symptoms are found in other conditions and careful study and good judgment are needed not to confound them with visceroptosis. In short, accurate diagnosis is imperative in these cases, if we are to be successful. In no other line of work does greater disaster wait on error.

For convenience, I have divided the operations into four classes, but in most cases a combination

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of two or more will be indicated and the results will depend on the wise selection of methods suitable to each case. The operations are:

First, those on the abdominal wall.

Second, to shorten visceral supports.

Third, to make new supports by fixations of the organs or their mesenteries.

Fourth, resections and anastomoses.

There are two operations recommended for the abdominal wall, the first to strengthen the lower abdomen and the other to expand the upper part. The weak abdominal muscles allow the viscera to sink to the lower part of the cavity, thus increasing its area, while the upper abdomen contracts as the weight pulls downward on the ribs and thus narrows and diminishes its area. The object for expanding is to make room for the viscera replaced by other operations.

Webster's operation to strengthen the lower abdomen consists in the splitting of the tendon of the external oblique, and after separating it from the internal oblique push one edge as far under the other as desired and fasten with quilt sutures; then unite the free edge, making an imbrication. By this means the abdomen is strengthened and reduced.

The operation for expanding the upper abdomen (Coffey) is done by first making the incision in the middle line. The sheaths of the recti are not opened. After all intra-abdominal work is completed, incise both sheaths one inch from the middle line, dissect loose from the recti, leaving the muscle bare; after the peritoneum is closed, unite these flaps at the middle line.

The falciform ligament of the liver and the gastrohepatic omentum are shortened for central ptosis. These are seldom strong enough to give support alone, but combined with other procedures are useful in appropriate cases. The falciform ligament is shortened by taking two or three short bites with needle, then passing through the preperitoneal tissue, thus folding it and attaching it to the abdominal walls; five or six are passed on each side. This can be strengthened by passing four or five quilting stitches through the parietal peritoneum and the edge of the right and left lobes of the liver. Where this ligament is elongated and the liver drops far below the costal border, this operation is of service.

The gastrohepatic omentum in these cases is generally attenuated and not strong enough to hold much weight, but a few stitches, folding it in pleats, will shorten it. Care must be exercised not to injure vessels. This is called Beyer's operation.

The chief support for ptosis of the cecum (mobile cecum) and midline ptosis, viz., of the stomach and transverse colon, must be artificial adhesions.

Rovsing attaches the stomach to the anterior wall by a series of silk sutures. He described his operation as follows: "Parallel with the lesser curvature I lead three strong silk threads in and out through the serous coating of the anterior surface of the stomach, leaving the pars pylorica free. The upper thread is placed close under the lesser curvature, and the two others, with an interval of about 2 cm., are placed in such a way that the greater curvature and a rather large piece of the wall above this are left free. With a fine needle the serosa coating between the threads is now scarified in all directions, also the surface of the parietal peritoneum, and eventually that part of the under side of the liver to which one wishes the stomach to adhere. The ends of the silk threads are led out through the entire thickness of the abdominal wall, that on the left as far from the center line as the rib-curvature permits, and that on the right at about 3 cm. to the right of the center line. The peritoneum is now joined with catgut, and the fascia and skin with aluminium bronze, and, after the line of wound has been covered with collodion and cotton wool, the silk sutures are tied over a glass plate covered with sterile gauze, the dimensions of which are a little larger than the stomach-surface which has to be fixed. In this way it follows that the anterior surface of the stomach lies flat, and close to the abdominal wall, without shrinkage and folding. These threads are left for four weeks and are then easily removed. A perfectly secure and solid adhesion is then obtained without leaving any foreign body in the abdomen."

He reports 162 cases with 63.2 per cent. cures: 12.8 per cent., great improvement; improved, 7 per cent.; no improvement, 12 to 18 per cent.; deaths, 4.6 per cent.

Rovsing's operation does not seem to have found any extended approval. In spite of his results, operators hesitate to fix by extensive adhesions an organ normally mobile like the stomach. One would expect serious interference with its functions. Adhesions formed by disease often cause much trouble, but these are usually at the pylorus, which is avoided in Rovsing's operation. Still, one cannot resist the conviction that such extensive attachment would interfere with the functions.

Coffey's hammock operation seems more rational. It consists of suturing the great omen-

tum to the abdominal wall. "The incision is held wide open by retractors, and the parietal peritoneum at the edge of the wound is pulled out as far as possible, especially on the left side. A needle armed with Pagenstecher linen or chromicized catgut is passed through a good bite of the parietal peritoneum at the point on a line crossing midway between the ensiform cartilage and the umbilicus, and as far toward the left as the sutures can conveniently be placed with a needle-holder. (In some instances we have closed the space entirely to the costocolic ligament.) The omentum below the greater curvature of the stomach is then inspected and the direction of the vessels examined and the needle is passed through a bite of the gastrocolic omentum one and one-half inches below the lower border of the stomach. The omentum is now turned up and the same suture is passed, taking the second bite through all the layers of omentum just below the colon. The two ends of the suture are now tied. The next suture is placed about one-half inch nearer the median line. After three or four sutures are thus placed on the left side it is well to place a like number on the right side so the normal relations may be observed. Do not place the sutures as far from the median line on the right as has been done on the left side, owing to the fact that the stomach is a left-sided organ."

Right-side ptosis and mobile cecum are often accompanied by nephroptosis, the kidney having been pulled down by the weight of the cecum.

Coffey replaces the ascending colon and cecum and attaches it to the posterior abdominal wall by a series of purse-string sutures through the serous coat of the colon and the parietal peritoneum. These are placed on the external side and as many applied as necessary; this is done through a right rectus incision and the patient's head is kept low for three weeks by raising the foot of the bed.

When the kidney is much displaced he uses the lumbar incision, and after fastening the colon as above he attaches the capsule of the kidney to fibers of the quadratus lumborum muscle. These operation form adhesions which imitate Nature's method of supporting most of the abdominal viscera. The ascending and descending colon are supported by a mesentery which is fused with the posterior abdominal wall. These artificial adhesions seem to offer the best supports at hand, and in many cases kinks and angulations are fully relieved.

Coffey reports forty-one cases, of which twenty-six were symptomatically cured; nine were very much improved; four were better, but still com-

plained a great deal; one unimproved, and one died.

There are some visceral displacements that these measures described will not remedy, and for these Lane has recommended radical operations, anastomoses and resections, to correct ptosis and kinks in the colon. His recommendations are quite startling and the profession has generally regarded them as too radical. Still, as one studies this question, it is hard to escape the conclusion that in a few, a very small per cent. of those who suffer with visceroptosis, radical measures alone promise relief, and in these extreme cases, where all other measures have failed, and the sufferers are incapacitated for useful labor, they offer some hope. The transverse colon is too long and falls into the pelvis, causing angulation at the flexion, and these may be so extreme that none of the operations can secure artificial support strong enough to hold. In view of the greater mortality, these operations should be reserved for cases in which safer methods are inadequate.

The cecum may be so large and mobile and the ileocecal so lax that it is unable to empty itself. Dr. Noble has shown that a lax, open ileocecal valve allows regurgitation into the ileum, and the same condition is found as in the heart when the valves fail to close properly. As in the heart, the cecum first hypertrophies and later dilates, a pouch is formed which is constantly filled with stagnant material, and this becomes putrescent and teems with micro-organisms. Toxic products which destroy health are constantly absorbed.

Imbrication to reduce the size of the cecum and reduction in the patency of the ileocecal valve the doctor has found of service. Anastomosis of the cecum with the sigmoid, or the ileum in the sigmoid, or even resection of the cecum, or large parts of the colon, is justifiable in extreme cases.

The sigmoid is also at times redundant and the mechanical difficulty of emptying becomes greater until dilatation, and at times volvulus renders interference imperative; this may be relieved by attaching part to the abdominal wall, but resection, or short-circuiting by anastomosis, is indicated in some cases.

These operations of resection and anastomosis are so fully described that I will not attempt to give the technic.

It is quite apparent that we must thoroughly study, by every method of investigation, each case. Determine as nearly as possible the nature and location of the displacements and causes or forces which have produced them. The condi-

tion of the parts should be determined as accurately as possible before the operation, but one must be prepared to meet all conditions disclosed when the abdomen is opened. The operations must be adapted to the needs of each case.

I wish to repeat that these operations are indicated only in those cases in which medical treatment has failed. The mere fact that there is even a marked decensus of the viscera does not justify an operation. The stomach may fall below the umbilicus, may be vertical, the transverse colon may be almost wholly in the pelvis, and the functions of these organs may be fairly well performed. It is when this ptosis is attended with grave disturbance of digestive and eliminative functions and the entire system is disordered and poisoned, giving rise to grave systemic disorder, and remain after the best medical treatment, that an operation is to be considered. Coffey states it clearly in the last paragraph of his most excellent article, on which, with those by Rovsing and John G. Clark, I have drawn freely in the preparation of this paper: "In closing, I wish to reiterate that only a very small per cent. of ptosis cases as they now come to the doctor are surgical; and, further, I concede that in bringing forward this subject of ptosis and stasis we are opening one of the most dangerous fields for surgical abuses that has ever been opened to the surgical 'confidence man,' who needs no other excuse for performing a surgical operation than the consent of the patient. X-ray observation is of inestimable value in the study of these cases, but is, I concede, the most dangerous agent yet placed at the disposal of the unscrupulous surgeon, because it is so convincing to the laity, and at the same time so meaningless when considered independently of the history of the case and not properly interpreted."

DISCUSSION OF THE SYMPOSIUM ON VISCEROPTOSIS
(PAPERS OF DRS. SEXTON, COLE, SCHELL
AND WALKER)

DR. JOSEPH RILEY EASTMAN, Indianapolis: Dr. Cole has stated that colonic stasis may be caused by enteroptosis or coloptosis. That, I think, is quite true, and, contrariwise, I think, ptosis of the intestines may produce a colonic stasis. I think in the majority of cases it is the stasis which precedes. It is difficult to imagine that the normal propulsion of the intestinal contents could go on in the transverse colon which hangs like a hammock suspended at each end by the taut ligament on the right side, the hepato colic ligament, and on the left side the phrenocolic ligament. It is not an unusual thing to see,

as we saw this afternoon upon these skiagrams, a double-barrel arrangement of the large intestine on both sides. We see the two limbs of the large intestine hamstrung by these ligaments on each side, the two limbs hanging like a stocking over a clothes line, the median portion of the transverse colon clear down to the pelvis. Certainly, in a case of ptosis of that kind we would expect stasis to follow. I think the greatest and most important factor in the etiology of this condition is simply constipation, and the most important thing which we have to consider in this connection is prophylaxis. We must, as Dr. Schell has stated, begin with the young children and teach them to eat and teach them the importance of proper elimination and the great importance of exercise. We must be more strenuous physically and not forget what Dr. Deaver said a year or two ago at a meeting of the American Medical Association, namely, he would be willing to wager that Teddy Roosevelt had not a dropped stomach. If people will walk and eat moderately and eliminate properly, we will not have these conditions of ptoses. There is not much doubt but that constipation in a very large percentage of cases leads to the formation of adhesions about the intestine which, of course, must greatly inhibit normal vermicular movements of the large bowel, if not the small intestine. These adhesions come as the result of stasis and constipation, and we find them in rather surprising abundance in dogs, the animal which is notoriously constipated. These adhesions can be produced experimentally in animals by the experimental production of protracted constipation. Mr. Lane tells us that these membraniform adhesions, like the membrane on the right side, called Jackson's membrane, represent the crystallization of forces to resist displacements of the intestines. They represent an effort on the part of nature to reinforce the normal mesentery. They are trying to hold up the overloaded transverse colon or the overloaded ascending colon, or even the overloading descending colon, because we find these adhesions, membraniform in character, or of other character, on the right side mostly, but on the left side as well.

An interesting illustration of the importance of proper tonus of the large intestine is that shown by the correction of cecum mobile, as described by Wilms, by the operation of fixing it to the parietal peritoneum, so that it can act as it should, as the bulb of a syringe acts, in forcing the column of intestinal contents upward. When it is too free, too loose, it becomes ballooned because there is atony of the circular muscular fibers to such a degree that it is not possible for the weakened and dilated cecum to force the contents of the intestine upward. If we look into this simple matter of chronic colonic stasis, with

its chronic intoxication, we will not have need to consider dangerous operations described by Dr. Walker, and, as he has said, such formidable operations should be reserved for extreme cases. We should not have these extreme cases had we dealt with the question of prophylaxis intelligently. I have seen Mr. Lane extirpate the entire colon, and in the hands of a master technician like Mr. Lane it did not seem to be a difficult operation. In these cases of chronic constipation, with chronic overloading of the large intestine, the mesentery becomes elongated, and even in that part of the intestine we do not expect a mesentery, he picked up the whole large intestine and gathered up the mesentery with a few stitches and took it all out, and his results seemed to be very good. He showed some cases he had operated on a few months ago in which he had obtained excellent results. I do not believe that we should permit patients to get into the condition which requires such an extensive operation as complete resection of the colon, nor should we permit them to go to the point where they require short-circuiting operations, but we should prevent all that by practicing the plan set forth by Dr. Schell.

I was amused at a remark which Mr. Carliss, another London surgeon, made to me after witnessing Lane's work. Strange to say, Carliss did not know, although everybody else seemed to know, that Lane was taking out the entire large intestine for constipation. I saw Mr. Lane, a day or two before, resect the entire large intestine for constipation, and Carliss expressed great amazement that Mr. Lane would do such a thing, and said, "Well, I should hate to be the constipated." (Laughter.) I must say, I would not like to submit to such extensive resection of the colon. After all, it is in a simple way and by a simple plan that we shall be able to relieve most of these cases effectually, namely, by giving constipated patients Mr. Lane's Russian oil, which in my hands has proven one of the most useful things of which I know. He advocates the use of Russian oil, and it is now sold by hogshead all over this country; but our old teacher, Dr. Theodore Potter, in my student days advocated the free use of albolen, and as near as I can make out, Russian oil and albolen are one and the same. They get the petroleum from the Russian fields, and so they call albolen Russian oil over there, but I fancy a good many of these cases of colonic stasis can be saved an extensive operation by a protracted course of albolen and strychnia sulphate; in other words, Mr. Lane's Russian oil.

DR. CHANCEY W. DOWDEN, West Baden: Albarran, in the light of some recent experiments, has pointed out that in 27 per cent. of new born babies, females, visceroptosis was found present, and in 4 per cent. of males there was visceroptosis, and in forty-eight per cent. of children,

females, under twelve years of age, there was visceroptosis, and something like 14 per cent. of visceroptosis in the males. When we get visceroptosis in a new born baby, it is not due to constipation, but to a faulty embryologic development. In analyzing these cases we get cases of general ptosis, more or less. The stomach is down, the right kidney is down, and we arrive at the conclusion that they are down because they have lost some of the intra-abdominal or extraperitoneal fat. Why have they lost fat? Because they suffer from auto-intoxication; they have cold hands, slight digestive disturbances, and such things. Why do they suffer from auto-intoxication? Because they have intestinal stasis. Why do they have intestinal stasis? Because they have faulty embryologic development. A great many surgeons are not favorably impressed with operations of the character that have been described. The quadrupeds are raised with supports for the stomach, mesenteric supports for the kidney and colon, and these in their embryologic development are attached to the spine. Man has extra supports. The stomach is attached to the esophagus and to the junction of the first and second portions of the duodenum, and hangs as a hammock. The colon is attached to the splenic flexure and hepatic flexure by a mesentery.

Recently, in reviewing some literature, these operations have shown that there is a failure to obliterate the omental bursa or the original mesenteric ligament, after suspension of the colon in embryologic development, and it has remained intact, and there has been no gastrocolic ligament, allowing the colon to sag, that being one of the causes of constipation. In some instances we have diarrhea or looseness of the bowels. I do not believe that in any of these cases, where we have active elimination, this has been preceded by constipation, but in the course of constipation the colon sags, and eventually the mesenteric ligaments or attachments, the hepatic flexure and splenic flexure, give way, allowing the whole colon to drop. When the angulation is straightened out we get better elimination and sometimes even diarrhea, but I believe all of these cases have been preceded by constipation.

As far as correcting these conditions is concerned, the only thing we can do is to correct the constipation, and that frequently suffices. It allows the patient to take on fat and makes him more comfortable. We cannot cure these patients. They may retain their fat; we may regulate their diet and keep them comfortable and may overcome some of the slight defects in development which, if not attended to, will produce dire results in later life.

DR. W. R. DAVIDSON, Evansville: This program to-day is very fruitful because it represents the latest research. This work is particularly interesting to me because it is only in the

past few months I have been using bismuth, and some of the results have been surprising. There is one point I want to mention in connection with the etiology that Dr. Schell touched on, but it is well worthy of elaboration because of the interest it will have for the general practitioner. This was brought forcibly to me within the last ten days, and that is, the influence of pregnancy, the laxity of the abdominal walls following pregnancy. There must have been a good deal of empiric truth in the old idea that the puerperal woman should be thoroughly bandaged, but the average bandage that is placed on her is worse than useless, because it is up above the umbilicus. Where the bandage has been placed down low it gives support that is well worth having. I refer to the long binder De Lee recommends, which goes from the arms to the knee. It can be applied tight, and I speak of it in connection with a case I have in mind of a very large woman, who had a miscarriage about six months ago. I saw her about ten days ago when she complained of having an "all gone sensation" as though everything had fallen and was trying to come out. I gave her a properly fitting belt, and saw her five or six days thereafter. She said she really felt better than she had for several years: that it gave support. The general practitioner should bear in mind the use of an abdominal support during the term of pregnancy, particularly in multiparae, the ones who have lax abdominal walls. A properly fitting belt or binder is of great service. So true is that, I have for a number of years had women during the last five months of pregnancy wear a linen belt I had one of the druggists secure, and in addition allow them to make suspenders to swing the weight over the shoulders. One woman in particular had not been off her back for three weeks, yet half an hour after she put it on she was down and was able to move about.

The later work in the bismuth skiagram carries out the idea of prevention of visceroptoses.

DR. ALBERT E. STERNE, Indianapolis: All of us, who see a great many of these cases, have been impressed with the fact that very few short, stout people are subjects of visceroptosis, while occasionally we do see a droopage of organs in persons of this habitus. As a rule, it is in the slender, long barrel-shaped individuals in whom we know and hear of this condition. They are from childhood predisposed almost to this condition, and as Dr. Dowden reports, even in children a predisposition toward this has been noticed, which our habits doubtless favor to a great degree. Children are born constipated, and probably through just such a state as that which Dr. Dowden mentioned, namely, a general droopage of the organs which is congenital. While nature seldom makes a mistake, she certainly did not design us, internally and somewhat exter-

nally, also to walk on two feet. The excess of force then used has been changed from the time when our ancestors walked on all fours. Animals which walk on all fours do not suffer from any such condition as visceroptosis, although certain animals are constipated. It is a very debatable question which precedes, the anatomical disorder or the coprostasis. Naturally if either one obtained it would favor the further development, for a vicious circle would be created in a purely mechanical way; just as sinuses drain up hill instead of down hill, so our abdominal organs are faultily placed by being on our feet, the reason probably for the French newer therapy of having persons walk around on all fours. There is something more than merely the question of constipation in this descensus of the interior organs. It is very frequent, and I see many individuals who are sent to me with a diagnosis of chronic nervous indigestion or chronic nervous dyspepsia, and I have examined them carefully from every angle, as I think Dr. Cole will bear me out in saying, and I have concluded that there is no such thing as chronic nervous dyspepsia. It does not exist. Acute nervous indigestion or acute nervous dyspepsia is very common. Chronic nervous dyspepsia per se does not exist. Whenever that clinical syndrome which we speak of as chronic dyspepsia confronts us, there is something wrong inside of that belly, and it can be found if carefully looked for, and the best corroborative means to help us in reaching a safe diagnosis is the x-ray screen and the bismuth test. But the screen is more important in my mind than the x-ray plate. The x-ray plate alone is misleading, especially in the hands of persons who are not accustomed to interpret it. It takes an expert to interpret the x-ray plates correctly. If you think for a moment, you can see how readily the x-ray plate can mask the condition where you have a constricted portion of the gut, and the bismuth flows up to the constriction and through it and dams on the other side, and the plate shows bismuth on either side, it looks as though there was nothing wrong there; whereas, if you screen carefully and bring the bismuth up and see it flow through the obstruction, there is no doubt as to where the lesion exists. I should oppose the view of Cole, of New York, that x-ray bismuth screening is useless. It is more important than the plate and should be done in association with plate work.

In regard to the surgeon, it is easy to see that we should attack these individuals early. The trouble is we do not get them until after the condition is established, after the constipation has become chronic, and if any one thinks the correction of constipation is a simple matter, I should like him to tell me how he tries to overcome that difficulty in a simple way. I cannot. Constipation to me is one of the most difficult

problems to solve that I encounter. In these far-advanced cases I like the attitude taken by Dr. Schell and Dr. Walker, that we should be extremely conservative in our surgery there; yet when you consider these chronic invalids, absolutely useless to themselves and to every one else, constantly complaining, if you do a certain operation you obviate certain things without special advantage; they keep coming back, you resort to the use of opiates for them to keep on with the necessities of existence, then you are confronted by such a drastic measure as Mr. Lane has advocated.

Not long ago Dr. George Crile, of Cleveland, returned from London, and he remarked to me and to Dr. Mix that he had not taken up Lane's ideas; that he had kept away from them for years; that he had not done any of the drastic operative measures Mr. Lane had advocated. He had not removed a single colon so far for constipation, but that after seeing Lane's cases and carefully studying them, after noting their after-history, after noting their rosy cheeks and general well-being, he had concluded that Mr. Lane was probably right, and the surgeons in this country and in England were probably wrong in opposing Mr. Lane's idea, and under our eyes Dr. Crile removed practically the entire colon of a woman who had had three previous operations at the hands of eminent surgeons for the correction of these conditions. Dr. Mix had the good fortune to see the patient afterwards, and told me this morning that she had borne the operation splendidly; that she was relieved practically from all suffering.

We are at this moment confronted in our own personal work by two cases, one an adult, and the other a baby of 2 years of age, both of whom Dr. Cole has repeatedly screened and skiagraphed, and we anticipate the complete extirpation of the colon in one case, and probably extirpation of the colon in the little child, because I realize in both of these cases, the first of whom has had three operations, we are up against a most difficult proposition. The chances are that in a comparatively small per cent. of these severer grades of visceroptosis we will be compelled to resort to severe, serious surgical measures to gain the desired result.

DR. P. H. LINTHICUM, Evansville: In listening to these papers along the line of prophylaxis, there is one point that has not been mentioned. Surgeons err along the line of prophylaxis. In a desire to be spectacular, they let patients get up too early after operations. Unless there is some good reason for allowing a patient to get up early after operation, would it not be better in the way of prophylaxis in these cases of visceroptosis to allow them to remain in bed longer than we might do otherwise.

DR. CHARLES M. MIX, Muncie: I do not think sufficient stress has been laid on the problems

that confront us. The idea of prophylaxis is excellent, but we are not able to accomplish much by prophylactic measures after the distressing state of advanced visceroptosis and stasis has developed. I think every man present has seen many of those cases that come to the general practitioner undiagnosed, and they come to the surgeon occasionally, and they are certainly in a pitiable condition. Very many of them have been subjected to a long course of treatment for constipation without any appreciable result. They have marked neurasthenia; they are forsooth very miserable; they have all sorts of pains; they have distinct attacks of violent constipation and vomiting, which are only relieved perhaps after rest in bed and the giving of large quantities of Russian oil, albolen, castor oil, etc. Those patients have very often been subjected to a series of operations. Their pain is often localized in the right lower quadrant; they have submitted to appendectomy; they have been explored for gall-bladder trouble, and their gall-bladders have been drained, and they have only been made worse, and not better. They come to you and beg for relief. They would willingly submit to any kind of surgery that would offer relief.

Dr. Eastman has described the work of Mr. Lane. He has seen it; some of us have not; apparently by his comments a tremendous operation is done, as I gathered from talking with Dr. Crile, in a very rough manner. He literally tears out the whole colon down to the sigmoid and stitches it up solidly, makes a quick anastomosis, and gets out. He has a reasonable amount of primary shock, but curiously enough, he has no secondary shock, and these patients clear up from the moment of the operation. That is a very curious fact. They come to the operating-table with cold, sweaty hands and feet, with neurasthenic symptoms, and obstinate constipation; they have a wet, leaky skin. That is the way these cases have been reported to me. I am not going to tell you about Dr. Crile's idea in regard to why these people do not die. They ought to die after such an operation, one that is done in such a rough manner.

Another contention of Mr. Lane is that these cases do not do well if partial colectomy is done; if you take out the cecum and ascending colon they do badly. His explanation of it is that he has not removed enough of the cesspool. He believes in taking out all of the cesspool.

Some work recently has been done at Cleveland in Crile's laboratory on the adrenals, and he has arrived at the point where he has done one operation for blocking the nerve supply of the adrenal gland in a case of arteriosclerosis. This is an interesting chapter; it has not been published, but you will find it in the medical journals next year. He conceives the idea that the

reason the Lane operation does not cause shock and why the patients do well is because of the roughness of it. In other words, by the roughness of the operation he blocks both adrenal glands and prevents shock to a certain extent. Crile has repeated the operation on dogs, and curiously, the adrenals were blocked; there was no throwing down of adrenals, and the test was negative.

It seems to me that this subject deserves very careful study at the hands of every thoughtful medical man, no matter what line he is interested in. Whether the ultimate solution is surgical, I care not, but I am certainly interested in these cases. These patients come to us in a pitiful condition, and I wish to repeat, the right thing is to deal with the end results of the cases. We can begin with prophylaxis, but prophylaxis will not do them any good, and Russian oil will not do them any good except temporarily. It is my hope in the near future that some method of handling these cases will be worked out, and possibly it will be along the line of the procedures advocated by Coffey, or Lane, or Longyear, or possibly it may have its answer in medicine.

DR. A. C. KIMBERLIN, Indianapolis: With reference to the remarks concerning Mr. Lane, I do not see how the doctor can say that he is rough in his surgical work. In his surgery of joints and extremities he is very careful, and he is more so when working in the abdomen. I have seen him operate on two occasions, and only a man who is prejudiced can say that he is rough as an operator or that his methods are rough. One reason for his success in this field of surgery is the fact that he is quite an expert in selecting his cases. He makes it a special study. He is really what we call a crank in observing and studying and associating symptoms in a given case before he operates. It is a great mistake to say that Mr. Lane is rough in his manipulations because he advocates radical measures in some of the cases under discussion. He is a very careful man. He weighs carefully the clinical evidence, and that together with his skill as a diagnostician is to my mind the explanation of his success.

DR. A. M. COLE, Indianapolis (closing): We have much to learn. Dr. Carman did not say anything this afternoon because it was not the time to say it. Dr. Carman is conservative and very wise. I think if Dr. Mayo had been here he would have said nothing, because he is not ready to say it. Dr. Carman was kind enough to show me a letter to-day from a specialist on the gastro-intestinal tract, who had been studying under Hutrick. He has examined 23,000 cases of gastro-intestinal trouble in ten years. He says there is no such a thing as gastropptosis. As I see more of these cases, I find I am growing in the belief that pure gastropptosis is not a very com-

mon disorder. In other words, we are attributing symptoms to gastropptosis that are caused from other conditions.

Intestinal stasis is a big subject, and I know that the Mayos are not ready to express their opinion regarding intestinal stasis. You cannot get a word out of Dr. Carman about it, although he says he is going to study the subject more thoroughly than he has in the past. He has some ideas that he will not say very much about. Either Dr. Hutrick is five years ahead of us or he is wrong. I am inclined to think he is five years ahead. Anyhow, I firmly believe that in the next ten years we will have a great deal to learn, and in that time we will have some startling information.

Just one other word: we must take into account that the type of stomach fits the type of patient. Because you find a stomach low down, it is no sign that the symptoms which the patient has come from that stomach. I made up my mind in regard to that some time ago before I talked with Dr. Carman. So we have to keep that in mind and be prepared to find that we have been wrong about a great many conditions in the gastro-intestinal tract which we feel to-day we are pretty sure about.

DR. WALTER SCHELL, Terre Haute (closing): A word with regard to the anatomical proposition. I heard Chandler say seven years ago that there was no such thing as gastropptosis; that it was scarcely possible for the stomach to drop down, anchored as it is by the esophagus to the diaphragm. It is so anchored that it will scarcely permit of the organ undergoing ptosis. A change in the position is usually due to the mobile portion of the stomach, the orifice may sag down, but it is scarcely possible for the whole organ to fall.

CONTACT POINTS OF OPHTHALMOLOGY AND RHINOLOGY WITH GENERAL MEDICINE*

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I have been given to understand that it was the wish of the members of this section that there be included in the program a paper, the chief motive of which should be to keep the work of the section in touch with the profession as a whole, to promote the solidarity of the Association. I therefore understand and appreciate the spirit of this invitation and thank you for the courtesy of it. I have chosen as the subject of

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this paper: "Some Contact Points of Ophthalmology and Rhinology with General Medicine."

The field is a wide one and many things might be brought forward to illustrate our theme. But I must not occupy much of your time and must, therefore, limit the selection. I cannot teach you anything in the field of ophthalmology and rhinology that you do not already know, and shall certainly not preach at you. I shall be brief, simple and direct in trying to point out some things which may help to remind all of us that we are members of one profession, that constant and free exchange of thought, of knowledge and of experience, and close and continued contact are necessary if we are to be efficient coworkers.

I have selected two subtopics for discussion:

First: Disorders occurring early in life which may seriously influence the physical and mental development of the individual, such as partial or total blindness or deafness, adenoids and recurrent tonsillitis.

Omitting those cases which usually come with and are incident to the diseases of advanced life, it is, I believe, correct to say that a large proportion of the cases of total or partial blindness develop in infancy or childhood. It is necessary only to cite such things as ophthalmia neonatorum, the childhood effects of syphilis and tuberculosis and corneal inflammations and ulcerations. And surely it needs no argument to prove the serious influence of such total or partial blindness on the whole subsequent physical and mental development. Think of the interference with education, the limitation of social activities, the similar limitation of physical activities and out-door life which do so much to promote normal physical and mental development, and the great limitation in the choice of a life-work.

Any special influence which you can exert toward the prevention of blindness, and any special skill which you can exercise to cure, to diminish, to retard such blindness in early life, will therefore be not only a saving of vision and a relief of immediate suffering; it will be a beneficent contribution to the whole subsequent career of those so helped, and thus both the responsibilities and the opportunities of such work reach far beyond the limited sphere of your daily practice.

Though the sense of hearing is far less important than that of vision, and the loss of it less serious, yet what has just been said of blindness and its remote effects is true, even though in less degree, of deafness.

The child who is subject to recurring attacks of acute tonsillitis loses, with each attack, from one to three weeks of school, and this may in the

aggregate amount to serious interference with its education. Each attack is accompanied by a pronounced toxemia with its resulting toxic anemia. These recurring attacks of toxic anemia may result in a chronic anemia. The digestion is disordered, sleep is abnormal. In minor degree the phenomena attending the acute attacks are frequently present more or less constantly.

The point is this: that such a child is not simply the victim of uncomfortable attacks of tonsillitis, from which it is desirable that it be relieved; it is liable to be more or less seriously crippled in its development. The family physician may be called on to treat it, now for acute or chronic indigestion, now for anemia, now for nervousness even to the extent of chorea, or to give it a tonic because it is in a general way below par. I do not wish to exaggerate and be an alarmist. There are, of course, all grades of such cases. But as presented in the average of such cases these things mean that such children are going through the developmental period of life handicapped. And the proper treatment of such trouble at the proper time may remove a stumbling block in the way of the child's whole subsequent career. Only as the family physician and the specialist look at it in this broad way can and will they most frequently and efficiently cooperate in the removal of such stumbling blocks.

We must pass over, for lack of time, such matters as glandular tuberculosis and acute and chronic arthritis in relation to tonsillar disease, though here, too, we might find additional illustrations of our topic.

But one other subject we must not omit, even though it be trite; for it is so important and so forcibly illustrates the relationship between rhinology and general medicine. I refer to the so-called adenoid disease.

That much has been said about it, even to the extent of widespread public discussion, we all know. Yet, I think it will bear emphasizing again.

This disorder renders the child more susceptible to acute colds in the head, and makes such attacks more severe and protracted; it is often the underlying cause of distressing earache; it has much to do with those developmental abnormalities which have received the name *aprosopia*; and that it is an important factor in acute and chronic aural inflammations with their possible complications and sequels, is equally notorious. But I wish here to emphasize two other features of it. The first is this: that adenoid inflammation is not only a constant part of a cold in the

head, but that this abnormal adenoid mass at the vault of the pharynx is not infrequently involved in the ordinary attack of acute follicular tonsillitis. This is the explanation of the protracted and somewhat mysteriously intractable course of some such cases. The treatment directed toward the faucial tonsillitis, and which is usually so successful, strangely fails. The patient does not recover as rapidly as the condition of the faucial tonsils would seem to warrant. An examination of the vault of the pharynx will sometimes reveal the reason. The adenoid is the seat of a similar follicular inflammation which the treatment has not reached. This fact is not generally recognized; yet I feel sure, from repeated observation, that the statement is correct and submit it for your confirmation.

The other feature of the adenoid disease which I would specially mention is its interference with normal respiration. This too has not failed of emphasis by rhinologists. We speak of mouth-breathing in a child as unseemly, uncomfortable and, in an indefinite way, harmful. It may be as you know a really serious matter. It often causes a persistent though moderate cough, and makes the child more susceptible to acute bronchitis; it is often the underlying cause of simple croup. It interferes with the normal development of the chest and of the thoracic organs, and thus directly and indirectly compromises, during the developmental period, one of the most important vital functions, the respiration.

There results, therefore, a chronic anemia, and defective digestion and nutrition. I am sure I could point to a number of young people who have come through the developmental period of life distinctly below par and largely because of this disease. These are not rhinologists' fads; they are matters of real import, which you do well to keep before the profession, and thus to illustrate the relation of your work to general medicine.

Let us turn now to our second subtopic: the diagnostic significance of disorders in these fields with reference to general medicine.

Some years ago the late Dr. J. L. Thompson, in reporting on the ocular examination of one of my patients, said: "Doctor, have you examined this woman's urine?" You know what he meant. He had read in her eyes the diagnosis of Bright's disease. In another instance he suggested an examination of the blood, whereupon I discovered leukemia. Have none of you found reason to suggest to the family physician a course of antisyphilitic treatment because of the discovery of certain chorioid lesions?

How many times have you been called on to help settle the diagnosis of cerebral compression or brain tumor by the use of the ophthalmoscope? And in how many such cases would the diagnosis have been more certain had you been asked to assist?

Notably in this field of neurology has the examination of the eyes become so important that many neurologists have felt the need of training themselves in the use of the ophthalmoscope, that they may establish a diagnosis for themselves or recognize things which demand a more expert examination.

Certainly in view of such things the intelligent ophthalmologist cannot fail to recognize his opportunities and duty to instruct and aid others; and the intelligent general practitioner cannot fail to recognize the diagnostic contributions which ophthalmology offers to general medicine.

The same thing is true, though perhaps in less degree, of otology. Not long ago a thorough otologic examination failed to find, in any local condition, the explanation of certain aural symptoms. Being, by this negative diagnosis, driven back to further search, I came on the plain evidence of developing pernicious anemia. And so all along the line of such disorders as arterial sclerosis, nephritis, diabetes, rheumatism, syphilis, tuberculosis, the anemias, and acute and chronic brain lesions, we may find illustrations of the diagnostic contact points between ophthalmology and oto-rhinology and general medicine.

In conclusion, may I express one or two thoughts of general import, and applicable to all of us. We must not be too insistent, either as individuals or as groups, in setting apart and appropriating in an exclusive spirit this or that field of knowledge or of work. Ours is a liberal profession. As such its first requisite is freedom. All working knowledge is for him who can use it for the task he has in hand.

If one occupies the position of general practitioner he should not voluntarily dabble with things which he cannot do at least reasonably well. If one has formally announced, as a matter of professional expediency and personal choice, the limitation of his practice to a certain field, common honesty requires that he be consistent. But surely there is nothing in the spirit of science or good fellowship which would deny to one or the other any knowledge or the practical application of it in the work which he is legitimately doing. If the one uses the ophthalmoscope and laryngoscope or removes impacted cerumen from the ear, should the other feel that his field is invaded? If the other, in searching

for the origin of laryngeal lesions, strips the patient and examines his chest, or looks through the microscope for tubercle bacilli, or tests the urine for albumin, should the first feel that his toes are being trampled on? Surely not.

Should the fact that one is working in general medicine deprive him of a knowledge and application in his work of the contributions which specialism has made to the profession? And should the fact that you are an oculist or you a rhinologist, therefore close to you the whole beautiful field of bacteriology and clinical pathology? Surely not.

Indeed, I can think of nothing more attractive and helpful than for the specialist in any field to have as a working adjunct to his office at least a simple laboratory for clinical pathology and bacteriology.

May we not all happily abolish from our minds the fetish of stepping on toes, and cultivate rather the spirit expressed in the lines of Tennyson:

"Let knowledge grow from more to more,
And more of wisdom in us dwell."

I have said that there must be between specialists and the general profession, between general medicine and specialism, a constant exchange of ideas, of knowledge, and of experience, and constant working contact, if we are to maintain the solidarity of the profession and the most efficient cooperation in our daily work. But in all of this there is something more. It is not all of life to live, to exist. It is not all of our professional life to do even well the daily task. There is, in the hand to hand union, and in the contact of mind with mind, something more than efficient cooperation. There is in it a personal and professional satisfaction which goes far toward making our professional life the more worth living.

CARE AND TREATMENT OF PNEUMONIA *

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Pneumonia, with its short and often violent course, with its spectacular crisis, with its frequent occurrence and its heavy mortality, has always held a deep fascination for me. Of all the diseases incident to ordinary practice I would rather treat pneumonia than any other. No other disease, perhaps, will so ably repay you for especial personal care and supervision in the les-

sening of your mortality, in the gratitude of the family and patient when the crisis is safely passed, and in your own sense of well feeling for a worthy foe met and vanquished.

The exact understanding of the processes that take place during an attack of pneumonia is a matter that has not as yet been thoroughly established. The last decade has seen a number of facts concerning the bacterial and cellular activities of this disease worked out in the laboratory, but even yet there is much that is unknown, in fact there is no inconsiderable difference of opinion as to the interpretation of some of the facts already established.

From the literature I am going to select what seem to me at present as the most probable theories concerning pneumonia and upon this basis to discuss its care and treatment.

In the first place the initial onset is produced by some lowering of body resistance. Clinically we are all familiar with the history of exposure to cold, wet, sudden chill, exhaustion, etc. The bacterial cause is usually the *B. pneumococcus* although quite a number of other bacteria cause pneumonia. For the reason that the pneumococcus is the chief cause I shall consider it alone in this paper. Pneumococci are normal residents of the human throat. They are constantly being inspired into the lung in varying numbers, but do the body no harm, probably for two reasons; first, because the body is producing a specific proteolytic ferment against them sufficient to keep them from multiplying in such numbers as to cause harm; second, their growth is retarded by the absence of a suitable culture media. At the onset of pneumonia we find that the predisposing cause operates to inhibit the production of the specific proteolytic ferment and that there is an exudation of serum into the bronchioles. These two causes allow the pneumococci, which in the beginning are present only in small numbers, to multiply rapidly. The amount of lung involved is small at first but rapidly and irregularly progresses until a considerable portion of the lung is involved. The severity of the disease is not always concomitant with the amount of lung tissue involved, a small amount of lung involvement often producing a very severe intoxication.

The clinical picture of pneumonia is that of an acute intoxication, but just what the intoxicant is and how it is produced is at present uncertain. Heat killed pneumococci have little toxicity, nor have the culture fluids in which pneumococci have been grown shown any toxicity, neither does the serum from the blood of pneumo-

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cocci infected rabbits show any signs of toxicity when infected into other rabbits.

However, a toxic substance can be obtained from the pneumococci by several processes which result in the splitting up of the body of the pneumococcus. Freidberger has shown that by heating the pneumococci with immune serum, centrifuging, then treating them for a number of hours with serum containing complement at 37° C. that a toxic extract is formed. Upon these findings he explains the intoxication of infectious diseases, supposing that the bacteria, stimulate the formation of antibodies which sensitize the bacteria which are then acted on by the complement and the toxic substances are formed. Rosenow allowed pneumococci to stand in salt solution from 24 to 48 hours and obtained a toxic extract, this process he calls autolyses. Cole obtains this toxic substance from dissolving the pneumococci in a dilute solution of bile salts.

The probabilities are that these toxins are liberated by the digestion of the protein or the solution of the bacterial wall; whether they are preformed, the so-called endotoxin of Pfeiffer, or whether the process is one of anaphylaxis is uncertain. The toxin causing anaphylactic shock is liberated by the splitting up the protein by a proteolytic ferment. It is interesting to note that Dick has found in the blood at the time of crisis or soon thereafter a specific proteolytic ferment against the pneumococcic protein. Eggers reports the finding of increased antipneumococcal power in the blood of pneumonia patients, at or close to the time of crisis. A very interesting fact to note in connection with our speculation along this line is that every once in a while in our clinical practice we find cases that at or about the time of crisis have the appearance of an anaphylactic shock, with failure of the respiratory system or center, while the heart continues to beat after respiration has ceased.

In studying the leukocytes during an attack of pneumonia Russian workers have found first a hyperleukocytosis, then commencing about the third day a marked leukocytolysis and lastly a marked phagocytosis. Manoukhine finds that there is a gradual lowering of the resisting power of the leukocytes by the third day which continues until it is much below normal by the time of crisis. The weakened leukocytes succumb to the action of bacterial toxins, and the substances set free by the disintegration of the leukocytes starts the production of antibodies. As the leukocytes are broken up the pneumococci feel the toxic action of the bactericidal elements thus released and become weak and disintegrate, so that they fall a prey to the phagocytes. In fatal

cases there may be leukocytosis but no leukocytolysis, and there is lack of bactericidal and antitoxic properties in the blood.

Hirschfelder, in reporting some experiments on the production of immunity, makes the following statement concerning ten patients treated with an emulsion of washed living pneumococci. All ten of his cases recovered. In the majority of the cases the crisis set in within 24 hours after the first dose. "A striking fact observed was a rapid fall of the number of leukocytes within 12 hours and preceding the reduction of temperature." This leukocytolysis probably has a direct relationship either with the formation of a specific antipneumococcal proteolytic ferment or with the production of a neutralization of the pneumococci.

Clinically we notice still another fact along this line. Recently Cohen has shown the excellent results obtained by the use of the soluble double hydrochloride of quinine and urea. Morgenroth has done some interesting experimental work in the use of the quinine derivative ethylhydrocuprein. Of all the drugs used in pneumonia, quinine has had the most continuous vogue. The answer to this lies in the fact that quinine increases leukocytolysis.

The most spectacular feature of pneumonia is the crisis. As to what it is and how it is produced there is much uncertainty. Crisis and resolution are not identical nor concomitant, resolution may occur much later. Neither is crisis the destruction of the bacteria, for they have been frequently demonstrated as present several days after the crisis is past.

A study of the results obtained by experimenters as to the formation of immune bodies in the blood shows that while in perhaps a majority of cases immune bodies are found in the blood in greatest abundance at or about the time of crisis, yet there are so many irregular cases wherein immune bodies are not found for a day or more later that it would appear as more probable that in crisis we have a neutralization of the intoxication rather than the immediate destruction of the pneumococci.

Dochez found that two days before the crisis there was no protective power in the blood serum while he was able to demonstrate it in the serum in some cases as early as three hours after the crisis. This protective power was present for a few days and then disappeared. It did not however always appear at crisis, in some cases it did not appear for a day or more after crisis. Lyall, in his series of 42 cases, found that from some cause there were no bacteria in the blood at or after the crisis, even where it had been possible to demonstrate them previously.

In studying immunity it is found that it is hard to produce. Amounts of bacteria are soon reached where no amount of serum will save the animal. It seems probable that in actual pneumonia the body must respond with some additional protective measure to assist in the destruction of the pneumococci.

Rosenow has found that autolysed pneumococci soon become very toxic when injected into guinea pigs, but that later after an interval of some hours these autolysed suspensions become non-toxic and are harmless when injected, that is to say their toxic properties seem to be neutralized.

With these bits of results in mind let us construct a possible hypothesis. The pneumococci, with the destructive proteolytic ferment checked, and with an abundance of serum on which to feed, multiply rapidly, spreading through a varying extent of lung tissue and in serious and fatal cases invading the blood stream and involving other organs. The phenomena of the onset and the initial chill so often present I believe to belong to the causal factors rather than to the pneumococci. If it were anaphylactic it would necessitate protein splitting; whereas the probabilities are that it is the very absence of the normal proteolytic ferment which allows the pneumococci to grow. Another fact to consider is that at the onset, at the time of the initial chill there are probably very few pneumococci present in the lung exudate. The fact that Rosenow has detected pneumococci in the blood as early as 12 hours after the onset may possibly mean that in pneumonia we have an invasion of the blood stream first and that the pulmonary invasion is a secondary lesion, in which case the initial chill would be due to the invasion of the blood stream with pneumococci.

As the bacteria increase in number the intoxication increases, however not necessarily in proportion to the involvement of the lung or the increase in the bacteria, for here enter in three factors, the virulence of the pneumococci, the case with which the toxins are liberated, and the presence of neutralizing forces in the body.

It has been shown by several experimenters that the intoxicating element of the pneumococci can only be liberated by some process which destroys the chemical integrity of the bacterium, as a proteolytic ferment or the process of autolysis. Consequently it seems reasonable to believe that some such process begins early; but due to the rapid increase in the pneumococci in the serum of the lungs the normal amount of this element is not sufficient to handle the number present, if it were crisis would occur early. This

lack of cell splitting power is probably what calls forth the enormous increase in the leukocytes and it is from them that this body which destroys is formed, apparently by the results of the leukocytolysis. As we approach crisis we have the pneumococci split up by the influence of the products of leukocytolysis to such an extent that the patient approaches crisis with his intoxication at its highest.

Crisis I believe to be a neutralization, similar to the loss of toxicity observed by Rosenow in his autolysed pneumococci. The fact that resolution does not always occur at crisis, that the presence of bacteria may still be demonstrated, that there is often no bactericidal power present in the serum of the blood, all seems to point to this neutralization of toxemia.

A few hours previous to crisis so close as often to be confused with crisis, the abundance of toxin liberated by the protein destruction may produce in some cases a condition of anaphylactic shock.

That much of the foregoing is speculative, I must admit, but the discoveries of the last few years have become so suggestive that the building of a probable hypothesis is attractive if not justifiable.

The question of the infectiousness of pneumonia is another interesting problem. Every now and then we observe outbreaks that seem to point to pneumonia as infectious. This last winter I had the opportunity to observe five cases of pneumonia in one family occurring at consecutive periods of about two weeks. The items to be considered are three, environment, susceptibility and virulence. Was the causal factor in all these cases the same condition of living, weather, habits, etc.? I think not, for these cases covered a period of almost three months and were from 10 months to 72 years of age. I think the question of susceptibility and virulence are the ruling factors. During this epidemic four of these cases and four other members of the family had the measles, but at the time of the measles outbreak only one developed pneumonia. This was the second case and the youngest of the series, who was nursed by the grandmother, case number one, who had just gotten out of bed from her attack of pneumonia. The other cases developed at periods of about two weeks dating from the death of case number two, which occurred at the close of the measles epidemic. After case number two the house was thoroughly fumigated with the permanganate-formaldehyde method. In these cases I think the individual susceptibility of the patients combined with a probable increased virulence of the pneumococci was the reason of the outbreak.

Prevention of pneumonia depends largely on the prevention of conditions that will inhibit the proper formation of the normal protective proteolytic enzyme. Such things as exhaustion, wet feet, exposure to cold rains, especially when hot from exertion, exposure to sudden extremes of temperature and ill-ventilated rooms should be avoided.

I believe that we should consider the possibility of pneumonia being infectious and should isolate the patient and allow only the nurse to attend or to enter the room. The expectoration and excreta should be sterilized and all the measures of precaution usual in cases of infectious diseases should be adhered to.

In private practice, where a nurse is not available, members of the family should be chosen and instructed in the details most needful, and they and no other should be allowed about the patient. Visitors should be absolutely forbidden. The patient must be left alone as much as possible, he must have absolute quiet, no fussing, no talking, no unnecessary handling, no waste of a partical of energy that can be saved.

The room should be a quiet one, as far as possible, from the more used portion of the home. This room should have at all times an abundance of the purest fresh air, even in the dead of winter every outside door and window should be open. If there are not plenty of openings, move the patient to a better ventilated room. It has been discovered that cold will keep the blood pressure up, perhaps 15 points higher than the same patient would have in a warm room. The patient must be kept warm by covers and hot water bottles so as to not sap any strength in unusual heat production or by being chilled. At times of bathing, changing bed linen, etc., the room temperature may be temporarily raised to the required point.

The diet is a matter in which there is much difference of opinion and practice. Some feed, some limit the diet. Personally I do both and I believe that each case should be treated from an individual standpoint. There is but one item to consider, the conservation of the patient's strength. The disease is of short duration and if the patient has been robust he can get along on a low diet better than to ask his digestive organs to handle food, especially if there is a tendency to fermentation. If, however, the patient is ill nourished to start with it is wise to supply an easily handled diet throughout in order to give him as much strength as possible. If I favor either side of the question I think it is the side of the restricted diet based upon the short duration of the disease.

The increased respiration and fever causes the mouth to dry rapidly and considerable care should be used to keep its mucosa in a soft healthful condition. The bowels should be kept moving freely, especially in children where the swallowing of the coughed up mucus may cause a severe gastro-enteritis, if allowed to accumulate. This one item of clean stomach and bowels will mean a lessening of the fever average from one-half to 1 degree. For this purpose I find nothing better than continuous administration of tenth grain doses of calomel, with an occasional dose, where needed, of a more drastic physic. In children the use of castor oil at these times is preferable to any other physic. If there is much tympanitis add a drop or two of turpentine to the oil and apply turpentine stupes to the abdomen. This oil and turpentine treatment will relieve those sudden post-crisis rises of temperature so often found in children due to the swallowing of the profuse expectoration at this period.

The kidneys should be guarded carefully and the urine analyzed often. Give the patient plenty of water, urging him to drink so as to flush the urinary system. Temporary albuminuria will often occur without serious after-effect, but the presence of hematuria is of grave prognostic importance. I think that we should leave diuretics alone as much as possible. Where necessary I prefer the infusion of digitalis made fresh from the assayed leaves.

As to local applications to the chest, I have tried many different things from the malodorous onion poultice to a clean cotton jacket, and in my own practice I have chosen the clay poultice. This product should be fresh enough so that the glycerine is still intimately mixed with the kaolin and should have been ground into a perfectly smooth homogenous paste. A jacket should be prepared of the proper size where both lungs are involved or a strip of muslin of sufficient size to cover the affected side, upon this the clay should be spread the thickness of a silver dollar; it is then warmed over a stove and applied as hot as possible. This is then covered with a thin layer of cotton and frequently a hot water bottle is applied over this. This poultice should be split after application, up the axillary line to allow free expansion of the chest. It should be changed at least every 12 hours until the temperature is 102° or less, when it can remain 24 hours. After the crisis the clay is changed to a light cotton or flannel jacket which is worn until the patient is fully recovered. The use of this jacket speedily lowers the temperature, allays pain, and advances the day of crisis. By having the times of your visits and the times of its changing coincide you

can obviate its interference with your examination of the chest. In changing the jacket have hot water and sponge handy and wash the chest wall thoroughly before applying the new jacket. This poultice will greatly allay the pain of any attending pleurisy and often prevent this complication.

I believe expectorants are to be avoided for the most part. There is already too much serum present in the lung, why make more? Sometimes in the presence of a painful dry cough we are tempted to use something, in which case I use syrup of white pine compound without opiates of any kind and to this I add a small amount of syrup of iodide of calcium.

Pain in pneumonia is largely due to pleurisy, sometimes to a troublesome cough. When a pleurisy pain occurs I paint the affected region with tincture of iodine and apply a fresh hot clay poultice covered with a hot water bottle. Where this fails I resort to heroin, in very careful dosage. Morphine to me is something to be dreaded in pneumonia, its astringent and binding action on the secretions and excretions being something hard to combat, and I have never used it except in the last extremity. Pain early in pneumonia, such as to demand the hypodermic use of morphine, has been in my experience of grave prognostic importance. Late in the disease it may become necessary to use morphine to overcome restlessness and sleeplessness, but I would advise you to try every other conceivable measure first and only use the hypodermic as the last resort.

One of the problems in pneumonia is the care of the heart and the circulation. In the first few days the blood pressure remains about the same, then it commences to fall. Also we find a large exudation into the lungs with occlusion of the free pulmonary circulation, with more or less laboring of the heart to overcome this. The use of cardiac stimulants and blood pressure increasing drugs early in pneumonia is contra-indicated. Personally I use nitroglycerine early in pneumonia in the belief that it is a vasodilator of sufficient value to remove the vascular overpressure from off the heart. Further, nitroglycerine acts upon the respiratory centers in the medulla and accelerates and deepens respiration. Still further, I believe that the vasodilatation of both arterioles and veins extends to the affected lung tissue so that it lets a larger and freer blood stream through the congested tissue with the result that the amount of the nutrient serum in the alveoli is lessened and that the stimulus of the toxins of the bacteria is more pronounced so that leukocytosis and the resultant leukocy-

tolysis is more marked and occurs sooner with the general result of advancing the crisis. Recently Drs. Capps and Matthews have shown that nitroglycerine does not affect the heart but acts by depressing the nerve endings in the arteries and veins. In using nitroglycerine, be sure that it is fresh and true to dosage, give it every hour or two hours at most, as its effect is very evanescent; when given at longer intervals it is worse than useless. Give it often and in sufficient dosage to obtain a marked vasodilatation.

As the case approaches crisis it is in order to let up on the nitroglycerine and apply some direct heart stimulant and blood pressure increaser, if needed. But you will find that it is not often needed, for the usual labor of the first three or four days has been avoided and the heart approaches the hour of trial strong and buoyant, able to get along unaided. If the whip is needed, use strychnine or digitalis. You will find the infusion of digitalis made fresh from assayed leaves to be the most reliable weapon, but don't forget that the action of digitalis is slow and long continued. Increase the size of the dose as needed, but don't give it oftener than six hours. Many a physician has whipped his patient's heart to death, with too many floggings with digitalis. Also remember that if myocarditis is present digitalis may fail to stimulate.

The most important thing in all your treatment of pneumonia is your handling of the case as it approaches and passes the period of crisis. This is the time when your patient generally will die if he is going to. If you can just tide him over these few hours the victory is yours, and if ever there is such a thing as cheating death it is in these cases. To the ordinary practitioner here lies his finest opportunity for the saving of human life, and that too in such a way that the credit will be his and the lasting faith and thanks of the family will attend him.

Most patients with uncomplicated pneumonia, who die, do so at the time of crisis, and in one of two ways as a rule, either from the failure of the respiratory system, simulating anaphylactic shock, or from cardio-vascular failure. I have repeatedly seen patients of the first type who would quit breathing with the heart beating away. These cases, if left alone will die, and I verily believe that many a pneumonia patient has died because no one was near to use artificial respiration. In these cases I find it necessary to use artificial respiration over a period that varies from ten minutes to two hours; in the longer cases it is not necessary to use it continuously but only to stand by the patient and use it inter-

mittently as indicated. Early in my practice I had such an experience as this and since then I have made it a rule to go and stay with every serious case of pneumonia through the period of crisis. Trained nurses and members of the family cannot be trusted to have the judgment needed nor the courage to persevere, necessary to save these lives. It takes a lust for the battle with death and a pride in one's low mortality rate to spur one on through the night hours to that victory that comes with the patient's peaceful sleep in the morning.

In my experience I have not been nearly so often bothered with cardio-vascular failure as with the respiratory type. The fall in blood pressure, if it comes, is due to cardio-vascular asthenia which is produced by the toxemia. It does not set in until after the disease has progressed near to its maximum and blood pressure increasing agents are not indicated early, in fact they are not to be used at all unless clearly indicated. We should try to prevent any strain upon the cardio-vascular system rather than wait till the strain appears and then have to drive an already overstrained muscle.

In my cases crisis usually comes by the fourth day, quite often on the third day, and it finds the heart in good shape since it has not been abused by overwork or by stimulation. If there is a tendency to cardio-vascular failure I think one can use digitalis in reasonable dosage, but I find that quite frequently we have not time to rely upon so deliberate a drug and I quite often rely solely upon the use of hot and cold compresses over the cardiac area. Apply a steaming hot compress for five minutes, in emergencies this can be cut to three minutes, and follow immediately by a cake of ice; cold water or snow will do if ice is not available; keeping this on one minute, repeating the procedure three times. It is wonderful what this will do for the heart. It will arouse the patient from a stupor that otherwise would be rapidly replaced by death, and so far I have never seen it fail to stimulate the sinking heart and steady it and give you a little more time for the body to step in with her neutralization of the toxins and save the patient.

With bacterins, serums and the quinine treatment of Cohen I have had little or no experience. I have used the anti-pneumococcic serum in two cases, in one of which it apparently accomplished the ideal, and in the other I failed to observe any results even upon repeated dosage. Vaccines have been used by different workers with varying results due chiefly to the difficulty in breaking up the protein. I feel that it will not be long until a reliable method and vaccine will be found

for general use. Vaccines, as before noted, seem to act as leukocytolytic agents. The soluble double hydrochloride of quinine and urea in 25 grain hypodermic doses has accomplished much in the hands of Cohen and I believe should be more extensively employed since it is a leukocytolytic agent and leukocytolytic action seems to be the desiderum in producing neutralization of the pneumococcic intoxication.

I have treated something over 120 cases covering all ages from four weeks to 82 years in age and every type from the physically perfect to the alcoholic sot. I have had five deaths making my mortality 4.16 per cent. Four of my deaths were in infants under 18 months. Two of these developed pneumonia during an attack of measles and died from pneumococcic meningitis. The other two died also from meningitis. The fifth death was in a tubercular subject, aged 34. This patient ran a severe course with an apparent crisis on the sixth day accompanied by a fall of temperature, but developed a pericarditis on the seventh day and died on the ninth. In uncomplicated cases I have not had a fatality.

In making a study of the literature of pneumonia one is much astonished by the variety of results reported. It seems to me that the element of the personality of the attending physician enters largely into the question. The physician who would get results in pneumonia must realize that upon his own courage, his own watchfulness and his own resourcefulness depends the outcome. Let mortality tables show what percentages they may, one can always do better if they will but try.

DISCUSSION ON THE PAPER OF DR. MAPLE

DR. G. W. McCaskey, Fort Wayne: I think it is very important to make a bacteriological diagnosis in every case of pneumonia. The essayist mentioned the fact that while there were several other micro-organisms which produced pneumonia, he would limit his discussion to the pneumococcus. I do not think this is the correct point of view, because the specific therapy can only be carried out after making a careful bacteriological diagnosis in each individual case. This can be easily done by making a smear of the sputum, ascertaining the predominant micro-organism there, and then making a blood culture and finding out what sort of organism there is in the blood.

In regard to vaccine therapy, the recent communications of Flexner and Ehrlich at the International Medical Congress gave us a lot of facts which explain the discrepancies which we have referred to, and which we have heretofore had in the vaccine treatment of the acute infections.

It has been found that the disease germs can immunize themselves against destructive chemical bodies, such as bacteriolysins or any chemical substance by a process which Ehrlich calls a fixation, which makes the microorganism immune against this particular body. There is produced what the Germans call a fast strain, or variant type of the organism against which the chemical body is powerless. It is along these lines that we must look for any further advancement in a specific therapy of the infection. One by one we are adding specific therapeutic agents to our armamentarium. A few years ago we only had two, quinine in malaria and mercury in syphilis. Within a year or two there have been added two others, salvarsan in syphilis, acting as a treponemacide, and emetin in amebic dysentery.

The essayist raised the question as to whether pneumonia was primarily a local process in the lungs or a general infection with secondary involvement. I think there can be no question that it is primarily a bacteriemia and pneumococcemia, if it is a pneumococcic pneumonia, and a streptococcemia, if it is a streptococcic pneumonia. There is a well-recognized type of streptococcic pneumonia described by the Germans, and I have myself published a paper reporting three or four cases in which the streptococcus was the infecting organism. This case was clinically just like the pneumococcic pneumonia, the only substantial difference being the organism being found in the sputum and in the blood.

DR. MAPLE: (closing the discussion): It is no wonder we are so slow in getting results in specific medication of pneumonia. In looking over this subject in American literature for the last eleven years, I find there have been only five or six men engaged in the work. These workers have done most of their work on very few cases. Now if the medical profession is going along in this haphazard way, allowing three or four men to do this work on say forty or fifty cases, we may as well expect it to be a long time before anything worth while is accomplished.

DR. A. W. BRAYTON: Doctor, will you give us the statistics in regard to recovery of your own cases?

DR. MAPLE: That is one reason I wrote upon pneumonia. I have had very good results in my community. It is not a place where pneumonia gets well. There are quite a number of them that die. The fact that my statistics are so low is due to the fact that I go and stay with the patient. I naturally have my mind on the idea of serving the patient. I tell you, those of you who deal with pneumonia, that if you can keep that body going you will save many of your patients who would otherwise die. Many of my patients who would die on my hands I save by artificial respiration. Most of them who die do

so because of failure of respiration. If you let them alone they will die.

I had an experience with a lady to whose home I went to attend a case of this kind. I was staying with the patient, a child of four years of age, and I got down in the dark corner of the room to watch this child, and while I was sitting there I must have fallen asleep, for all at once I woke up and thought my patient was dead. He had stopped breathing. I thought to myself: "My goodness, it is a pretty way to go to sleep and let your patient die." I got the child over to the window and I heard the heart beat faintly. However, there was no respiration. This was the time that comes on just before the crisis. Right then is where you have to fight. It is only a few hours' difference between the toxic suspension and non-toxic suspension. It is the same way in the animal body. This child I took over to the window for about 15 minutes of manual respiration. I did that to bring the child back to life. The grandmother was all the time trying to pull me off, saying I was pulling the child's tongue out. She said that I was the roughest doctor she ever saw. However, the baby got well.

Now, that is the way you have to do. You have to realize that the difference between death and life in pneumonia is only a question of an hour. I am not a laboratory man by a great deal, but I say that the difference between toxic suspension and non-toxic suspension is a question of a short time. I stay with these patients if they show any severe symptoms. I have averaged about ten or twelve cases per year in 12 years, and of those probably every second or third one I will have to go and stay with. Some of them I stay with every night for a week or ten days, because I feel that time has no bearing on the matter when it is a problem of saving a life. I attribute my low mortality not to the treatment as much as to the nursing.

DR. A. W. BRAYTON: I didn't ask you, doctor, that question as a criticism. I just wanted to find out your method in detail. I want to congratulate you.

DR. MAPLE: I hesitated very much in reporting my mortalities. Dr. Cohen felt very proud when he got a mortality of 10 per cent. When I computed my mortality at 4.16 per cent., I felt ashamed to come down and tell you anything about it, because it is so open to discussion. However, Dr. Hurty is here, and you can take the death certificates from my county and see for yourselves. It does not matter what the mortality tables show. If you have the earnestness of purpose to go out and fight the case, you can save the patient's life lots of times where you would ordinarily lose it.

Let me say that I think the doctor's ability to fight has more to do with the patient's getting well than the medicine. It is the fight that con-

serves the patient's will power. It is the fight that makes him believe that he is going to get well.

DR. BRAYTON: This is a most interesting and important discussion—the most important I have heard in a long time. I am glad the doctor is a fighting man. It is easy enough to go over any community and take care of pneumonia patients. I can do that myself. However, here is a man who is giving the best there is in himself, going outside of what is ordinarily supposed to be a doctor's duty, and what does he do? He gets an unusually low mortality. Here is a man who goes out to fight an obstetrical case. He has to act as a nurse somewhat himself. Now, I want to say this: If there can be as much difference of personality in the saving of a pneumonia patient as there is in the saving of obstetrical cases, it is a great deal. I desire to congratulate the doctor upon his success, upon his pluck, and upon his fighting ability.

DR. MAPLE: It is immaterial what sort of respiration you use in these cases. I have never used oxygen and I doubt very much whether oxygen ever saved anybody. When I read in the paper that they took oxygen tanks down, I have usually noticed that the undertaker followed. I use the elevation of the arms and compression of the chest. I believe the pulmotor would be very good in these cases, but I have no community where we use the pulmotor for artificial respiration. I don't care what method of respiration you use, except that you keep a regular entrance and exit of fresh air. I commonly keep a window open. Don't forget when you get out on a case of this kind to tell the family that they must have fresh air, and if they won't give it to you, kick the window lights out.

DR. BENNETT, McCordsville: Doctor, there is one question I would like to ask you. I recently treated a case of pneumonia in which the pneumococci continued to appear for a period of 12 weeks. Then I had a second attack of pneumonia in the one individual. I don't know that I ever saw a case reported of this kind, but this I do know, because we tested it out. What explanation of this would you give?

DR. MAPLE: The explanation of that is this: You understand that when pneumonia gets well it is not the destruction of the pneumococci; it is the neutralization of the germs. This period of neutralization will last for a matter of two or three days, up to probably two or three weeks. We don't know the limit, because they have all escaped observation. Perhaps after this neutralization took place, and the patient got better, he then went out, at which time there probably was some portion still containing cultures of this pneumococci, and he had a reinfection of the disease. It was hardly a reinfection, because the pneumococci were there all the time. That explanation appeals to me as being the best

one. Probably when your patient gets over his crisis he still has pneumococcic germs in his body. That is the reason you see often a reinfection of the other lung, because the germs are not gone. It is a malneutralization of the germs, and you have to go and take care of your patient for several days thereafter, or you will have trouble on your hands. That is the explanation you perhaps desire.

DR. BENNETT: That is all I wished to know. Thank you very kindly, doctor.

SANITARY LAWS

W. F. KING, M. D.

Assistant Secretary Indiana State Board of Health

INDIANAPOLIS

If I were asked to name what, in my opinion, is the greatest drawback to good government in the United States to-day, I should unhesitatingly answer—"A multiplicity and confusion of laws." As a people we have almost reached the point where it is thought necessary to regulate by law every phase of human activity. Call the attention of the average citizen to any condition that threatens ill to himself or his neighbor and his first suggestion will be—"There ought to be a law against that." Or haply, if it be some condition concerning which a law has already been provided, he will say—"Why didn't some one look after that?"

In our zeal for regulating everything by law we forget that laws are not automatic, and do not enforce themselves, and that even good motives in the best of officials do not insure good deeds. We forget that government with law and order does not exist primarily in the hands of public officials, but rather in the minds and hearts of "we, the people," who, in both the first and last analysis, are the government.

A law at its best should be educational. The prime purpose of a law should be to lead and to point the way to better things. Any law that fails to do this, or that merely provides within itself the means of enacting a penalty for its violation, is not only useless but harmful. Such a law obscures the real principle involved, that of leading to a higher plane of voluntary action, and, in so doing, weakens the moral fibers of those whom it would govern. All such laws had far better be stricken from the statutes in nation, state and city. There is many a slip between the making of a law and its enforcement. Legislation which does not provide machinery for its own enforcement does little good, and frequently does harm.

What is thus true of laws in general is equally true of sanitary laws. Many so-called sanitary and public health laws now on our statutes are an obstacle to progress in preventive medicine. Many good sanitary laws are not enforced and cannot be enforced because public sentiment is not fully alive to the importance of preventive medicine. The natural result of this apathy is a withholding of proper authority and proper appropriations by means of which laws can be enforced. Hence, laws fail in their purpose. One of the greatest needs in efficient public health work in the United States is a National Department of Health, a great central educational institution for research, for information, for cooperation. There must be a well-organized national health department in which must center every function of the government in any way touching public health. The aid and cooperation of this department must be available to every citizen, every community and every city and state board of health in all public health problems, even as the aid of a National Department of Agriculture is now available to every farmer and every farming community.

It is a curious fact, and one by no means gratifying to our national pride, that when we wish to illustrate the value of modern sanitary laws and regulations we draw our most striking illustrations from outside the United States proper. For instance, modern sanitary science backed up by wise sanitary laws and sufficient authority to enforce these laws has abolished yellow fever in Cuba and the Canal Zone, has controlled largely the ravages of hookworm in Porto Rico, and has isolated and controlled leprosy in Hawaii and the Philippines.

President Taft said that in the twelve years we have been responsible for our people in the Tropics we have made more progress in the prevention of tropical diseases than all other countries have made in the past two centuries. This splendid achievement has been brought about by modern sanitary knowledge backed up by the intelligent and forceful administration of law. Results show plainly what might be accomplished in the United States by similar intelligent sanitary laws backed up by proper authority. Typhoid, tuberculosis, hookworm, the black plague and other preventable diseases are still ravaging the nation. If these were tropical diseases, what active measures we would take to control and destroy them.

Sound vital statistics are the fundamental basis of all public health work, and should be the fundamental basis of public health laws. A nation that does not provide for accurately registering

the births of its children, and the deaths of its citizens, places a low value upon human life, and could hardly be supposed to attach much importance to the conservation of human life. The division of vital statistics of the United States is in the Census Bureau of the government and is not in any way connected with the United States Public Health Service. The registration area of the United States from which but partially accurate or complete vital statistics are collected covers hardly two-thirds of the population. Vital statistics are the book-keeping of humanity, and should be as completely reported and as accurately kept as dollars and cents in the book-keeping of a bank. The nation certainly has no greater asset than the 90,000,000 lives that constitute the nation, yet 1,500,000 die annually without governmental knowledge of where, how or why they die, or whether or not a part might have been saved. Certainly no other department of government can be of more vital importance to the people under the complex conditions of modern life, and in view of the appalling waste of life as shown by statistics, than a national department of public health.

Just as in the nation, so in the state, every function of state government in any way touching public health should center in the state health department. The state department should be the center through which, and by means of which, accurate knowledge concerning health and disease is disseminated to the people of the state, and this department should be available for aid and cooperation to every citizen and every community in the state. The collection and recording of the vital statistics of the state is as indispensable as in the nation. Indiana, of course, is in the registration area of the United States, and has a much better vital statistics law than many other states in the registration area. It is fair to assume that 98 per cent. of the deaths occurring in Indiana are eventually accurately reported and recorded. It must be confessed, however, that probably not more than 60 per cent. of the births occurring in the state are reported and recorded. In one county of the state in July of last year, of 73 death certificates of children under two years of age, only 28 corresponding birth certificates were received. In August in the same county, of 62 death certificates of children under two years of age, but 19 corresponding birth certificates were received, and in September in the same county, of 72 death certificates of children under two years of age, but 32 corresponding birth certificates were received. Yet the vital statistics law of Indiana requires that all births shall be reported to the health

officer having jurisdiction, within 36 hours after such birth occurs; and imposes a penalty of not less than \$10 nor more than \$50 for any violation of the provisions of the law.

In every county there should be a county health commissioner chosen because of fitness and training, devoting his entire time to public health work, and receiving a salary commensurate with the importance of his work. In every city there should be a city health commissioner chosen because of fitness and training, to serve full time in public health work and with undivided authority in his department.

Under the present law, any doctor may be appointed health officer to devote only such part of his time to public health work as he may consider necessary. The notion that all doctors are hygienists and skilled in disease prevention is unfounded. Hygiene is a specialty of medicine, the same as surgery or gynecology. Under the present system, the greater number of health officers are unprepared and unskilled in public health work. Health officers are now paid meager salaries, not enough for support and, of course, must devote the greater part of their time to practicing curative medicine. Thus, they are expected to serve two masters, first themselves—second, the public. The cooperation of practicing physicians in preventive medicine cannot be secured by health officers who compete with them in the practice of curative medicine. This lack of cooperation, of course, greatly cripples public health work.

Under the present system there are 533 county, city and town health officers in the state. It would seem with this large number of officials engaged in public health work that conditions throughout the state would be revolutionized within a very short time, and yet because these men cannot devote but an exceedingly small fraction of their time to public health work, but little progress is made. With a health commissioner in each county and a commissioner in each city having more than 20,000 population, there would be 103 health officers instead of 533, and while the cost in salaries paid would exceed the present cost, these 103 officers would devote their entire time to public health work. Furthermore, all these officials would be skilled and competent, and would not be compelled to compete with other physicians, or be under any obligation to show preference or favor on account of professional consideration. Public health work can not attain its just place in public esteem until public health departments are placed on an equal plane with other departments in both county and municipal government. It cannot be too strongly

emphasized, of course, that all public health officials should be freed from political and commercial influence and should be chosen because of experience and training. Such a law would certainly be economy and good business. With such an organization public health work would make rapid progress, and a large portion of the more than \$20,000,000 lost in Indiana annually because of preventable disease, would be saved.

Some more public health laws are needed, but the greater need is for more public health in all laws. More public health education is needed, but it is equally true that more public health in education is needed. More sanitary engineering is needed, but even more important is the need for more sanitation in all engineering. The point is, that health and physical welfare is paramount and should be the first consideration in every activity of life, whether public or private. Intemperance may be a moral question, but alcoholism is a question of public health. Commercialized and legalized prostitution may be a political question, but venereal disease is a question of public health. The public school may be an academic question, but the health index of school children is a question of public health. Big business may be a question of economics, but sweat shops, child labor, tenement houses, excessive fatigue, hunger or air starvation, are public health questions. Insanity, feeble-mindedness and delinquency may be questions of correction and charity, but the betterment of the race is a question of public health. The great American fraud may be a question of patent laws and newspaper advertising, but the cruel physical deception, the patent medicine dope fiend, and the premature deaths, are questions of public health.

All of these questions will be solved only when science has been given a free hand, and by applying the same sanitary principles that destroyed yellow fever in Havana, and that stayed the black plague in San Francisco.

In conclusion then, the progress of health work in the United States depends not so much upon more sanitary laws, but upon more efficient organization and more efficient cooperation. It must be recognized that the paramount business of government is to protect and conserve the physical welfare of the governed, and it must be further recognized that no amount of money necessary to prevent disease, disability and premature death, can either be withheld or considered misspent. The problem is not so much one of laws as enforcement, not so much a problem of legislation as of administration.

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EDITORIALS

THE WHOLE-TIME HEALTH OFFICER

Accurate vital statistics covering a period of ten years in Indiana show that preventable death and corresponding unnecessary sickness levy a tax on the people more than double that paid into municipal, county and state treasuries. On the other hand, hygiene and sanitary science stand ready to prevent at least 50 per cent. of this enormous loss and waste through preventive rather than curative medicine. The present need in Indiana is a thoroughly trained, well-equipped and competent health officer in each county and in each city above 10,000 population, who will give his entire time to public health work and to bringing a knowledge of the laws of health to all the people of the community in which he serves.

Under the present law any doctor may be appointed a health officer. County commissioners appoint county health officers; city boards of health appoint city health officers; town boards of health appoint town health officers. These health officers are appointed for a term of four years with a meager salary and to devote as little or as much time to the public health as they may choose. Obviously such appointments will be political, and just as obviously a health officer will devote his time and attention to his practice first, giving public health work but minor consideration. The notion that all doctors are hygienists and skilled in disease prevention is not true in fact. Hygiene is a specialty of medicine the same as surgery, ophthalmology or neurology. Very few health officers at present are at all proficient in hygiene or prepared for the work to which they are appointed. The present pay of health officers is pitifully meager and inadequate, so that the income and living of health officers must be derived from their professional practice. They must serve themselves first and the public second. "No man can serve two masters," hence the public service is neglected. Public health work requires the cooperation of all physicians with the health officer and with the

public. This cooperation is seldom secured by health officers who must compete with other physicians in practice. By reason of this lack of cooperation the work of the health officer is more often discredited than supported, thus seriously hindering the enforcement of necessary sanitary measures. Moreover, a health officer who is also a practicing physician will seldom compel a patron to abolish insanitary conditions or observe sanitary laws for fear of loss of patronage. There are at present 557 health officers in Indiana with combined salaries of \$116,000 annually. The number of officers is greatly in excess of the need, while the standard of qualifications and the remuneration for efficient service is far below the need. One hundred competent and skilled health officers devoting full time to the public health will accomplish more in one year in disease prevention than the 500 health officers can accomplish in a generation under the present method.

The Indiana health law should provide:

1. Health officers to be appointed from an eligible list to be secured by having passed a satisfactory examination in hygiene, sanitary science and public health laws.

2. A health officer in each county, with powers and duties clearly defined, to serve full time, not to practice medicine nor engage actively in any business. Such county health commissioner to be paid a salary commensurate with the importance of his work, to have a properly equipped office at the county seat and to serve the entire county outside of cities having 20,000 or more population. In order that the appointment may be removed as far as possible from political influence, the appointing board should consist ex-officio of the county auditor, the county superintendent of schools and the county treasurer.

3. Each city having a population of 20,000 or more to have a city sanitarian to be appointed from the same eligible list as county health commissioners. City sanitarians should serve full time and not engage in the practice of medicine or actively in any other business, and should be paid a living salary.

Under such a law there would be 103 health officers in the state instead of 557 as at present. Each health officer, however, would be skilled and competent, would not compete with other physicians in practice, would not be compelled to show preference or favor on account of patronage and would devote his entire time to public health work.

Such a law would be economy, would be reasonable, progressive and good business. As the result of such a law, sickness and premature death would be greatly reduced, life would be

prolonged, wealth and happiness would be increased, and a large portion of the \$20,000,000 now lost annually through preventable disease in Indiana would be saved.

W. F. KING.

ANTITYPHOID VACCINATION

In all the history of the world there never has been such a wonderful sanitary achievement as the eradication of typhoid fever from the United States Army. No amount of theoretical proof or disproof of the value of typhoid vaccine can affect the practical accomplishment of antityphoid vaccination. Previous to vaccination in the army the best sanitary conditions were only able to reduce the death-rate to 19 per 100,000. In southwest Germany perfect sanitary organization and military discipline have only been able to reduce the typhoid death-rate to 4 per 100,000, while the case-rate for the United States Army in 1913 was only 3 per 100,000.

Antityphoid vaccination is as successful in preventing typhoid as vaccination is in preventing small-pox. The death-rate from typhoid in the registration area of the United States for 1913 was 16.5 per 100,000. There are no valid reasons why everybody outside the army and navy also should not be vaccinated. Vaccination against typhoid does not prevent other water or milk-borne diseases, so that advancement in sanitary improvements are as necessary after as before vaccination. No amount of improvement in sanitary conditions of milk and water will totally eliminate typhoid, for this disease is spread directly from man to man by the bacilli-carriers and other persons who have such mild attacks of the disease that no physician is called, or if called a proper diagnosis is not made and the sanitary disposal of feces and urine is not made.

Antityphoid vaccination has not increased other diseases, but, on the other hand, tuberculosis, the disease suspected of being increased, has decreased in the army since 1908.

Antityphoid vaccination is particularly valuable in the presence of a typhoid epidemic. Not only does it protect those unusually exposed, but also all those not especially exposed which typhoid seeks to pick out just as happens with small-pox in small-pox epidemics. Where there is a single case of typhoid in a family it is very important to vaccinate those not sick. This is especially important where a nurse cannot be employed or the family cannot be convinced of the contagiousness of typhoid.

Of the 500,000 injections given by the army less than 1 per cent. had a severe reaction. If care is taken in making the injection the severe reactions are very few. Practically all severe reactions come from making intramuscular rather than subcutaneous injections. The injections should be given about 4 p. m. and should be not less than seven days or more than ten days apart. Three or four injections are necessary. This typhoid immunity lasts about three years.

WILL SHIMER.

PATHOGENIC TUBERCLE BACILLI AND STREPTOCOCCI IN FRIEDMANN'S VACCINE

In our comments on the occasion of the first announcement by Friedmann of his alleged cure for tuberculosis, it was pointed out that the secrecy maintained in regard to important details was not in accord with the prevailing ethical standards of the medical profession, that the proposed treatment was without any justification of any experimental nature, and that the possible danger of acquirement of or reversion to virulence of the bacilli injected appeared to overbalance whatever promises of benefit the exploiter of the treatment might make. That this danger is not groundless is shown by the results of certain experiments and observations recently published by Lydia Rabinowitsch, who found that of guinea-pigs injected with acid-proof bacilli from Friedmann's vaccine, some developed small foci with bacilli in them and that one presented the picture characteristic of tuberculosis produced by the inoculation of feebly virulent tubercle bacilli of the mammalian type; furthermore, in rabbits injected with large quantities, slight changes resulted. Hence the bacilli constituting the vaccine vary from the type of tubercle bacillus, namely, that of cold-blooded animals, to which it has been announced by Friedmann that it belongs and which is not pathogenic for guinea-pigs and rabbits. To say the least, this observation places doubt on the methods employed in the preparation of the product, but there are also other ways in which to account for the presence in it of pathogenic tubercle bacilli. That the methods used in the preparation of the material sold for injection are crude in supreme degree is indicated by the fact that in a large proportion of different samples Rabinowitsch found streptococci, which were pathogenic for guinea-pigs. No wonder that abscesses frequently appear at the site of inoculation. In one such case Rabinowitsch found tuberculous

granulation-tissue in the wall, and she quotes Westenhofer as having made a similar observation, so that we now know that Friedmann's so-called remedy not only is subject to contamination with streptococci, but actually may contain tubercle bacilli that are pathogenic for guinea-pigs and rabbits as well as for human beings. Hence this remedy, for which much has been claimed, including harmlessness, fails in this respect also.—it is not harmless.—*Journal of the American Medical Association*, April 25, 1914.

EDITORIAL NOTES

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better *Journal* for you.

ALL aboard for the Atlantic City session of the American Medical Association! The railroads have authorized the rate of two cents per mile in each direction for the round trip, going and returning by the same route only. Tickets are to be sold and are good going from June 20 to 22, and returning to reach the original starting point not later than June 29.

THE Anti-Vivisection Society certainly wielded considerable influence on the judge who ruled practically in their favor in the trial of Dr. Sweet of the University of Pennsylvania for violation of the laws of Pennsylvania covering vivisection. The judge's interpretation of the law could in no sense be considered impartial, and it is quite possible that the unusual decision of the court will act as a boomerang.

THE Council on Pharmacy and Chemistry has determined by investigation that practically there is no difference between the ordinary theobromin sodium salicylate, selling for 35 cents an ounce, and the proprietary preparation known as "Diuretin," which sells for \$1.75 per ounce. Therefore, the employment of "Diuretin" in preference to theobromin sodium salicylate cannot be determined otherwise but as a useless and unnecessary expense.

REDUCING the number of medical schools and raising the standard of medical education has been a good thing and has worked for the benefit of the public in a way, but in one sense it has been the cause of the founding of numerous pseudomedical cults that have come into exist-

ence through a demand from those who do not want to consume so much time, energy and money in complying with the requirements of the practice of medicine according to regular standards.

VIRGINIA has abolished the special tax on physicians. Heretofore a Virginia doctor was considered in the same light as a peanut peddler on the streets, so far as being a means of raising revenue is concerned. In order to practice, a physician was required to pay a special tax of from \$15 to \$25 a year. This tax has been abolished. Virginia was one of the five states to impose such a tax, the others being Delaware, Louisiana, Georgia and North Carolina.

"CERTAIN doctors in a neighboring town have been advertising free telephone service to would-be patients. It occurs to us that this comes near the violation of the professional code, which forbids publicity beyond a card in the paper. Whether the medical association will bring these enterprising members to an accounting remains to be seen."—*Monon News*, Monon, Ind.

Why not give the name of the neighboring town and the names of the doctors who are given to this commercialism?

ARE you thinking of buying anything? If so, look through the advertising pages of THE JOURNAL and see what firms carry the articles you want. Go a step further than that and when you buy let the firm know that you saw their advertisement in your Journal and that your patronage is the result. We do not permit the advertising of any firm or article that is not reliable to appear in our advertising pages. Therefore, you may depend on them as a safe and sound business directory.

READ over our advertisements. It is worth while. They are paid for by those who expect some profit and return for the expenditure. They should be mutually helpful to the reader and to the advertiser. The fact that the advertising appears in THE JOURNAL is sufficient to commend it to your favorable consideration. The advertisers help support THE JOURNAL and as the advertising income increases so will the size and value of THE JOURNAL increase. Let the advertiser know that you saw his announcement in THE JOURNAL.

VIRGINIA has passed a bill which permits the chiropractors to practice in Virginia without being subjected to the necessity of examination

by the State Board of Medical Examiners. The bill was opposed by the regular medical profession, but finally passed both branches of the legislature and was signed by the governor. This is but a forerunner of what may be expected in the majority of the states. In fact there is a well-defined effort being put forth in many states to have the medical laws so amended as to permit any one to practice the healing art, provided no drugs are administered.

THE Preferred Accident Insurance Company of New York employs as an agency superintendent and adjuster in Chicago a man who is understood to be a devotee of Christian Science. A correspondent who furnishes the information says that he has written the officers of the company that it would seem as reasonable for a fire insurance company to employ a blind man to adjust a fire loss as for an accident company to adjust accident insurance disability of its patrons by the aid of one who religiously believes there is no actual pain, disease or disability.

MOVING pictures are now used in many schools and colleges to illustrate a variety of subjects, and we are advised that the medical department of Harvard University has used motion pictures to depict the muscular movements in various nervous diseases like chorea, locomotor ataxia, etc. At this year's session of the American Medical Association the H. K. Mulford Company will exhibit moving pictures to show the different processes employed in the preparation and administration of biologic productions. The field of usefulness of moving pictures is therefore ever broadening.

THE epoch-making work of Surgeon-General Gorgas as chief of the Sanitary Department of Panama has been recognized by some of our foreign confrères. On his way from South Africa, where he went in the interests of the British government, General Gorgas stopped in London, where the medical profession of that city gave him a dinner as a tribute to the great work accomplished at Panama. On the following day Oxford University conferred on him the degree of Doctor of Science. The honor is befittingly bestowed, and we wish that it was more popular in this country to do honor to those of our profession who have achieved something that is deserving of recognition.

THE medical profession and public have long been acquainted with the advertising of Valentine's meat juice. A recent report of the Council

on Pharmacy and Chemistry contains the following: "Valentine's meat juice is a fraud on the public, and in view of its continued exploitation under false claims, the referee recommends that the Council reiterate its former condemnation and authorize the publication of this report." The advertising circular sent out with Valentine's meat juice contains a large number of testimonials of the medical profession. All of the testimonials are undated, and one cannot tell how old the testimonials are, but the fact remains that medical men should be more careful about giving out testimonials, especially concerning a preparation that is sold under an incorrect name and under false and misleading claims.

EVERYONE is familiar with the "Tonsiline" advertising, with the picture of the long-necked giraffe and the announcement that "even if you had a neck as long as this fellow and had sore throat all the way down, tonsiline would quickly cure it." The American Medical Association chemist's report shows that a product having essentially the same composition as tonsiline would be:

| | |
|---|------------|
| Tincture of chlorid of iron (Ferric Chlorid), U. S. P. | 1 ounce |
| Alcohol | 1 ounce |
| Potassium chlorate | 280 grains |
| Water, sufficient to make one pint. | |

Of course "Tonsiline" never cured sore throat nor ever prevented diphtheria. The risk of poison from the use of potassium chlorate, especially by individuals who may be suffering from kidney disease, is not to be underestimated. Therefore, "Tonsiline" is both inefficient and dangerous.

SOME of our congressmen are distributing a reprint from the report of the Public Health Service of the United States on the prophylactic value of vaccination. The article is an excellent one and should have wide distribution among our people, and particularly in localities where small-pox exists as also in those localities where the antivivisectionists are active. Simple but explicit rules are given concerning vaccination, and the question of opposition to vaccination is discussed in a manner that should be enlightening to those who have considered vaccination as a dangerous procedure. Small-pox and vaccination statistics that are quoted should convince anyone that vaccination and revaccination cannot be too strongly urged as the only means of removing small-pox from our midst. We hope that this reprint will have a wide distribution and we recommend that physicians avail themselves of it.

IN the letter from Dr. John J. Kyle, published in this number of *THE JOURNAL*, the very patent fact is brought out that very soon the regular school of medicine will have little influence in the body politic. This is brought about through our increasing standards, with attending limitation in the number of our medical schools and in the number of our medical students, and a rapid increase in the pseudo-medical schools and their graduates who, with few or no requirements, are permitted to practice their trade. The public is gradually being educated to the viewpoint of these medical pretenders, and as the public controls legislation we may look for some decided set-backs in the progress of scientific medicine. Of course there will be a reaction in due course of time, but it is not comforting to look on the immediate outcome. What is occurring in California, as pointed out by Dr. Kyle, is occurring to a greater or less extent in every other populous state.

THE State Hygienic Laboratory of California is issuing typhoid vaccine to physicians free with the idea of attempting to immunize a considerable portion of the population. Typhoid fever was responsible for 500 deaths in the state in 1913. The vaccine as employed in California is prepared according to the method of Gay and Claypole of the University of California, and is made by treating a culture of typhoid bacilli with immune serum, killing with alcohol, grinding and removing certain undesirable constituents. This vaccine has been shown to produce fewer unpleasant symptoms than other vaccines, and its protective qualities are said to be greater. Each cubic centimeter of the vaccine is said to represent 750 million bacteria. It is possible to stamp out typhoid in Indiana by the same methods, and our State Board of Health is now furnishing gratuitously typhoid vaccine for the use of physicians, and various city boards of health are offering free typhoid vaccination to any who care to accept such protective treatment.

THE *Gary Post* is authority for the statement that some of the Gary physicians are guilty of making contracts with lodges and societies for medical attendance, and that the local medical society has gone on record as opposed to the contract system, and especially opposed to the so-called lodge contract system. It is said that under the rule adopted nearly a year ago, the physicians who are guilty of making lodge contracts will be expelled from the society. We are inclined to the belief that from a legal stand-

point it is not possible to expel a medical society member for engaging in contract practice, but it is possible for a society to make it so decidedly uncomfortable for those who do not live up to the high ethical standards followed by the majority of the members as to make it quite desirable to relinquish membership in the society. On the whole, however, the so-called contract practice is unsatisfactory to the physician and to those for whom services are rendered. The really competent and deserving physicians seldom lose anything as a result of the willingness of a few misguided doctors who engage in contract work at a mere pittance.

THE "United Doctors" have found Indiana to be a reasonably fertile field for their nefarious business, and yet they have not found it altogether devoid of embarrassment and trouble. In not a few cities and towns the representatives of this concern have been fined for practicing medicine without a license, or have been forced to leave the community as a result of prosecution for obtaining money under false pretense. The latest town to be abandoned by the "United Doctors" is South Bend, where Lee B. Kinsey, brother of Ben W. Kinsey, the original promoter, lived and had his headquarters. From there, according to *The Journal of the American Medical Association*, he directed offices at South Bend, Elkhart, Kokomo, Muncie, Evansville, several in northwestern Ohio, and a number of offices in Michigan. Most of these offices, like the one at Muskegon, Mich., where the owners were sued for rent, died a natural death. South Bend has not profited by the change from the "United Doctors" to Dr. S. M. Bartlett, specialist, who advertises himself as "Master specialist in chronic diseases," and has succeeded his employers and advertises under his own name.

THE Favorite Formula or Pet Prescription.—Every physician, whether optimistic or pessimistic in his general attitude toward the materia medica, usually has a favorite formula—a certain combination of drugs which he uses for many and varied selected conditions. It is his favorite formula; here is mine:

| | | |
|---|-----------------------------|-----------|
| R | Codin sulphate | gr. ii |
| | Acetphenetidin | gr. xii |
| | Aspirin | gr. xxxii |
| | Cinchonidin salicylate..... | gr. viii |

Make eight capsules. One every hour or two.

With this formula, under appropriate conditions, the cure of patients becomes strictly a case

of *cito, tuto et jucunde*, as we are admonished it should be. It will symptomatically cure grip, and if given on the first day will in many cases produce such an improvement by the second as to prevent its complications and incidentally—*malum in se*—do away with the doctor. I have used the favorite formula with satisfaction in most inflammations. There are other indications naturally suggested by its ingredients to which it seems excellently adopted and which it is unnecessary to enumerate.—Wilfred M. Barton, M.D., Washington, D. C. (*Journal of the American Medical Association*, April 11, 1914).

A WELL-KNOWN actress has presumably given her time, influence and money to a scheme for giving beauty hints (through the public press at so much per) to credulous women, and incidentally exploiting a number of cosmetics. The scheme is a profitable one and has many imitators, among which is Pearl LaSage, who is a "beauty specialist," and who is charged by *The Journal of the American Medical Association* with conducting a fraudulent mail-order business. The Pearl LaSage treatment consists essentially of a weak solution of ordinary soda and borax, with a little phenolphthalein as a coloring agent, and this is the mixture which is sold at an exorbitant price, under the claim that: "It heals, soothes, cleanses, softens and beautifies the skin, removing all impurities, pimples, blotches, black heads, eruptions, sallowness or lack of color, muddy complexion, liver spots and other skin imperfections." As *The Journal of the American Medical Association* well says, "when the public can be defrauded as easily as this, is it any wonder that actresses and others forsake the ill-paid drudgery of hard work for the easy money in fraudulent mail-order schemes?"

ONE of our sensible editorial writers has charged that *The Cosmopolitan* magazine is publishing filth that appeals to the basest morals of mankind. At all events, some of the fiction printed by this once popular magazine is decidedly off color, if not what some people would call "smutty." Therefore, we are not surprised to find this magazine publishing an article by Ella Wheeler Wilcox on vivisection and surgery in which the misleading and false statements usually circulated by the antivivisectionists are given prominence. Nor are we surprised to see in the advertising pages a full-page advertisement of the National School of Chiropractic of Chi-

cago, in which the statement is made that chiropractic is simple (we believe it) and that with a thirty-day course by mail one can become a chiropractor, capable of earning a large income. Many of the monthly magazines have refused to publish fiction that by common consent is considered not fit for the home, and the majority have long since refused to accept medical advertising, and in particular advertising like that to which we have called attention. Not so *The Cosmopolitan*, and we wonder if Hearst and his delectable publications have any interest in *The Cosmopolitan*.

The Journal of the American Medical Association announces an endowment of \$1,000,000 has been given by Mr. James E. Deering to the Wesley Hospital, Chicago, an institution which on previous occasions has received generous aid from Mr. Deering's father and brother. The income is to be used to help real charity patients, and the trustees have been requested to investigate the worthiness of those who apply so that the gift "shall contribute everything to real charity, nothing to pauperism." Mr. Deering says that "the best hospital is that which is closely related to a good medical school," and he stipulates that the Wesley Hospital is to be a teaching hospital, and an adequate staff to be provided by the Medical Department of Northwestern University. It is also stipulated that the medical school "must maintain and strictly enforce a high standard of preparatory studies for the admission of students." Finally, Mr. Deering states that it is his purpose "to give to the trustees of the hospital the largest possible latitude in the expenditure of the interest on the fund, provided that it shall be used for the benefit of the deserving poor." It is fortunate that we have a few men like Mr. Deering who are not only interested in practical charity, but in the advancement of scientific and educational standards.

CERTAIN pharmaceutical houses are making great claims for Crotalin in the treatment of epilepsy. Up to the present time there seems to have been no very reliable reports concerning the value of the remedy, and it is well known that the vague and indefinite reports from interested pharmaceutical houses are not to be given much credit. Recently Dr. N. S. Yawger of the Pennsylvania Epileptic Hospital and Colony Farm has published a paper in *The Journal of the American Medical Association* in which he gives his views as to the therapeutic value of Crotalin in epilepsy as based on the use of the remedy in

six cases of idiopathic epilepsy. In these cases two patients were uninfluenced; two were worse during treatment; one early in the course developed such intolerant toxic symptoms that further treatment was unjustified, and the last patient died two and one-half months after treatment. Concerning the last case, Dr. Yawger says that while death undoubtedly did not result from the use of Crotalin, the patient's disease certainly was not benefited by the treatment. In view of these results it would seem that the value of Crotalin in the treatment of epilepsy is questionable, and the possible ill effects should be made known to the patients and their families when requests are made for trial of the remedy.

IN the November number of *THE JOURNAL* the following general news note appeared: "A stock company, under the management of Dr. Frank Stackhouse, has organized with a capital of \$20,000 to establish the Dr. Stackhouse Sanitarium at Crawfordsville. The sanitarium will be open to all physicians who desire to obtain better facilities in the treatment of disease." An anonymous correspondent has called our attention to this news note and commented sarcastically on our giving space to the item, and to back up the criticism sends us a newspaper in which the Stackhouse Sanitarium and its proprietor are pictured in connection with a "quackish" write-up concerning the institution and its aims and objects. Dr. Stackhouse would not have received any notice in the November number of *THE JOURNAL* had we known anything about his reputation or methods, but every editor is dependent on others to a more or less extent for news items, and in the case at issue the news item came in from one of our correspondents in the usual way. We are quite willing to admit that Dr. Stackhouse is not deserving of any favorable notice from any reputable medical journal, though we disclaim any ability to exercise infallibility in the selection of news notes that come from all over the state, and presumably from men who can be trusted.

WHAT have medical men done to secure representatives for the next session of the Indiana state legislature who will be in sympathy with the aims and objects of the medical profession? The time to accomplish results is before nominations are made, and certainly before elections. When we wait until the legislature convenes before determining the attitude to be assumed by the various representatives we often find that

a tremendous amount of work must be done to convince certain legislators of the soundness of our position concerning public health matters and certain educational standards. At the coming legislature we shall be called on to defend the medical practice act, and prevent such legislation as would nullify its effect. We shall also be called on to use our influence in behalf of much-needed appropriations for public health work and medical education. We shall be in luck if we are not called on to work for the defeat of vicious bills introduced by ignorant or prejudiced legislators with the avowed purpose of harassing if not preventing the medical men from carrying on some part of their professional work. How much better it would be if we could be assured in advance that legislators are selected or at least elected with not only a knowledge of but a promise to look after, in an intelligent way, the varied interests which receive the support of the medical profession.

It is remarkably strange how ill some of our prominent financiers can be when they are sought to give testimony before the interstate commerce commission or some other court of inquiry concerning questionable business deals. It is passing strange how suddenly these erstwhile invalids recover if their private business interests demand their attendance at directors' meetings or any office consultations. Another surprising thing is the difficulty encountered by certain physicians in making a diagnosis of the illness of these gentlemen, for, if we can place any confidence in newspaper reports, it not infrequently happens that some leader in the financial world is pronounced desperately ill by his family physician, so ill in fact that giving testimony in a court of law would be apt to end fatally, and yet it is not hard to demonstrate that these cases of "serious illness" do not last longer than is necessary in order to prevent the sick man from being dragged into court or brought before some tribunal where damages would be likely to be brought out under oath. Can it be possible that doctors have made an error in their diagnoses, or is it possible that doctors can be influenced in making wrong diagnoses? Perish the thought! Anyhow, we are in favor of making the big man testify, and if he feigns illness, then let him produce evidence to show that he is really ill. If he is too ill to testify in a court of law he is too ill to engage in business or pleasure of any kind, and he should be given to understand that his

testimony must be given at the earliest possible date. Feigned illness should not be tolerated any longer than it is necessary to prove the deception.

LACK of unity of purpose and a certain indifference to public opinion on the part of the medical profession is accountable for the growth of the army of medical pretenders of every kind who now impose on the public without let or hindrance. The trouble with the regular medical profession is not that it fails to accomplish anything for scientific medicine, and for humanity, for it has performed an epoch-making work, but it has been a selfish and altogether too apathetic profession in its attitude toward public opinion. Instead of working harmoniously for objects that are necessary for progress, and taking the public into our confidence, there has been too much jealousy on the one hand and apathy on the other to bring about results urgently needed by both medical profession and public for the highest good. In other words, we have failed to make our influence felt as a profession, and in consequence the public has been led astray by the vicious teaching and influence of pretenders, and this in turn has had its effect on legislation. This is seen by the rapid growth of the various schools of healing and the pernicious activity of antivaccinationists, antivivisectionists and a horde of other more or less organized people who are attempting by every possible means to obstruct the progress of scientific medicine. If we are to preserve our position in the body politic that we are entitled to through education and experience, it will be necessary for us to become more united in purpose and throw our influence to the work of educating the public to the point where it will at least have the opportunity of offering comparison between what we have accomplished and what has been accomplished by others.

FACE powder has its dangers the same as gunpowder. For several years occasional cases have come under the observation of oculists in which the patients, invariably women, complain of vision being blurred, inability to use the eyes for any length of time and severe itching of the lids. The slightest rubbing of the lids produces a marked redness of the eyes and only aggravates the itching. In severe cases the lids are frequently swollen from constant rubbing. There is a sticky, elastic secretion which, when being removed, pulls out in long strings. Microscopic examination of the secretion reveals masses of what appear to be crystals. Until recently

no satisfactory explanation of the presence of these crystals in the eye has been given. Secretion taken from the eyes of two sisters suffering from this peculiar complaint were submitted to the professor of pathology of one of the university medical schools, who found that the crystals came from rice face powder. Seven other patients in which the same symptoms and microscopic conditions were found all used the same make of face powder. When the powder is applied to the face with a puff a portion of the fine dust is driven upward and lodges on the moist eyeball. The rice powder in the presence of the tears then becomes mucilaginous in character and is not washed from under the eyelids. The powder produces the irritation, which is aggravated by rubbing. Those who use a chamois-skin in applying the powder are less liable to cause the fine dust to arise, which probably accounts for the condition not being found in every woman using face powder. The condition is quickly relieved by flushing the eye with boric acid solution. The irritation rapidly disappears when the eyes are kept washed out with a soothing eye-wash.—*Journal American Medical Association*, May 2, 1914.

DR. J. N. HURTY, our very efficient secretary of the Indiana State Board of Health, deserves an immense amount of credit for the persistence with which he urges each Indiana legislature to appropriate funds for the protection of the people. In spite of opposition, oftentimes of the most vicious character, Dr. Hurty, by his very persistence and the effective manner in which he has presented the subject, has managed to secure funds with which a truly remarkable work has been done in the state of Indiana. One of the unique and beneficial accomplishments was the securing of the appropriation of \$2,500 for the publication of what has been called the "Indiana Mothers' Baby Book." When the project was announced in the legislature it was met with derision and a prompt motion to table the resolution. A day or so earlier the legislature had appropriated \$25,000 for the purpose of stamping out hog cholera. The very pertinent remark was made by some of the supporters of Dr. Hurty that if the legislature could afford to appropriate \$25,000 to help save the hogs of Indiana it ought to be willing to appropriate \$5,000 to help save the babies of Indiana, for certainly babies are worth one-fifth as much as hogs. The legislature finally cut the amount of the appropriation to \$2,500, and with that amount Dr. Hurty has prepared and is distributing a book which we

believe is destined to play a very important part in saving the lives of thousands of Indiana babies. The book gives simple and plain instructions concerning pregnancy, child birth and the care of babies. It is intended that it shall supplement and aid the physician, and, not in the least degree, prescribe medical treatment. Beginning with February 1 of this year a copy of the book is sent to every mother when her first baby is born. It may be that the next legislature will not consider that the Indiana babies are worth one-tenth as much as the hogs of Indiana, but we hope that the good that has been accomplished through the publication and distribution of the "Indiana Mothers' Baby Book" will in some measure influence the incoming legislature to such an extent that it will be less difficult to repeat, if not add to the appropriation that was made by the last legislature. At all events Dr. Hurty is deserving of great praise for what has been accomplished in the face of very marked opposition based on ignorance that is so dense as to be painful. We hope that the next legislature will exhibit a sufficient amount of intelligence and liberality to raise the ratio of value placed on hogs and babies.

For several months small-pox has existed in various localities in Indiana and health officers have been vigorous in their demands for vaccination. Quite naturally vaccination meets with some opposition on the part of many intelligent and well-meaning people aside from the senseless opposition which comes from the real anti-vaccinationists. This opposition from intelligent people arises from a well-founded fear of infection, and it is nothing short of a disgrace to the medical profession to have not a few cases of pus infection due directly to carelessness on the part of physicians in the performance of vaccination or in the selection of virus. In fact we are forced to admit that there are altogether too many doctors who have very curious or perverted ideas as to what constitutes even ordinary cleanliness to say nothing of asepsis. The value of vaccination has been demonstrated over and over again, particularly in Germany, where small-pox is never seen except as an importation. It is unfortunate that such a beneficial measure should receive the slightest ill-repute through the carelessness or indifference of medical men who are called on to administer it. We believe that the medical profession should unhesitatingly announce that vaccination under proper precautions is absolutely harmless, and that when trouble arises as a result of vaccination it can be

attributed to one of three things; the lack of surgical cleanliness on the part of the physician, an infected vaccine occurring as a direct result of carelessness on the part of the manufacturer, or introduction of infection to the wound by the patient himself through failure to observe precautions prescribed by the attending physician. Fewer violently sore arms and sick individuals, followed by an occasional death from vaccination, will go a long way toward stamping out the very wholesome fear of vaccination which is held by some people who frankly state that they will not take the risk until there is real cause for it as a result of the possibility of being exposed to small-pox infection. In this connection it is well to offer objection to repeated revaccinations which in so many cases are entirely unjustified. It has been conclusively shown that a person who has had a successful vaccination within a period of ten years is reasonably immune from small-pox. Unless there is urgent need for caution as a result of the prevalence of small-pox in the neighborhood, we are not in sympathy with the demand on the part of some physicians that revaccination should be performed at least once in two years whether there seems to be need of it or not.

For a few years we heard a great deal about the extraction of cataract by the Indian method. In effect, the operation consists in the extraction of the cataract in its capsule, and the method has received great popularity through the teachings of Major Smith of India, who has operated many thousands and reported exceptional results. Not a few American operators have journeyed to India to secure instruction and experience in Major Smith's clinic with a view to introducing the operation and the methods for performing it in America. As might be expected, the public has soon gained some rather distorted information concerning the operation, and not infrequently the oculist who is called on to extract a cataract is asked if he cannot do the Major Smith operation. In this connection it is just as well to remind our oculist friends that no operator in America begins to have the amount of material to operate on as does any of the East India operators, and the average American patient of intelligence, nervous energy, and particular in demands is not to be compared with the ignorant and phlegmatic native of India. The operation that might meet with success in India is very apt to meet with failure in America, owing to the increased demands which are placed

on the operator. But Major Smith, who is a fearless, bold operator of remarkable skill, is not quite sure as to the final results in his operation, and some of the American operators who have visited his clinic report after-results which in no way would be considered desirable here in America. For instance, the loss of vitreous, prolapse of iris, the irregular pupils, and the irritable eyes cannot be considered as desirable after-results, and in view of the fact that the majority of Smith's patients do not return for subsequent treatment or even the fitting of glasses, it is quite possible that the final results from the extraetion of the cataract in the capsule are even less successful than at first reported. In the hands of one less expert than Major Smith, the operation is very apt to be followed by more disastrous complications than occur at the hands of Major Smith. Therefore, it is the general consensus of opinion among reputable oculists that the extraetion of cataract in the capsule by the Major Smith method or any modification of it will not become very popular in America. In this country the oculist who operates to exceed twenty-five cataracts in the course of a year is the exception. Major Smith has been known to operate fifty-seven cases in one day, and he very frequently operates twenty-five to thirty in a morning. The average American operator must, therefore, have as his operation of choice the one with which he is the most familiar, and the one which is most apt to be performed with least complications and greatest promise of good results for the patient. Concerning this question of good results for the patient, it is a good plan to take into consideration the fact that the patient is blind and that he is not so particular about the highest acuity of vision as he is to receive useful vision in consequence of the operation. Therefore, the general adoption of a hazardous operation simply because when it is successful it is eminently so, so far as acuity of vision is concerned, is to sacrifice that element of safety which should always be taken into consideration in operating on a patient whose most precious function is at stake, and who, generally speaking, would rather take less chances and be sure of useful vision than to take many chances for the sake of a little more finished results. Therefore, the oculist who is besieged by a cataract patient to do the Indian operation, should not overlook the opportunity to explain the matter in such a way as to leave no room for doubt as to the method which is the safest and best for the average operator as well as the average patient.

DEATHS

LUMAN M. GODFREY, M.D., died recently at his home in Kentland, aged 84 years.

T. F. HOLADAY, M.D., died at his home in Mooresville, May 16, of paralysis, aged 79 years.

MRS. S. J. SHOPTAUGH, widow of the late Dr. S. J. Shoptaugh, died at her home in Princeton, May 5, aged 65 years.

O. P. PILARES, M.D., passed away at his home in Liberty, May 26, following a stroke of apoplexy, aged 59 years.

GEORGE W. WASHBURN, M.D., of Anderson, died at Indianapolis, May 9, from an overdose of morphin, aged 72 years.

HETTIE MCFALL, M.D., formerly of Fort Wayne, died at the home of her daughter at New Albany, May 21, aged 52 years.

MARY WIDDOP, M.D., assistant physician in charge of the state insane hospital at Longcliff, died at Logansport, May 26, aged 45 years.

JACOB D. MATER, M.D., a graduate of the University of Virginia in 1873, veteran of the Civil War, died at his home in Bridgeton, April 16, aged 67.

WILLIAM C. HENRY, M.D., died at his home in Aurora, May 18, at the age of 73 years. Dr. Henry was a graduate of the Miami Medical College, Cincinnati, in 1870.

MASON V. HUNT, M.D., died May 19 at his home in Anderson, aged 66 years. He had for many years held the position of medical director of the Liberal Life Insurance Company.

WILLIAM C. HENRY, M.D., died at his home in Aurora, May 20, aged 73 years. He was a charter member of the Dearborn County Medical Society and a member of the Indiana State Medical Association.

MRS. LEONORA WATSON WRIGHT, honorary president of the National Association of Army Nurses, who was in active service at the battle of Stony River and in the Jackson Hospital at Memphis during the Civil War, died recently at her home in Terre Haute.

BERTRAM U. DOOLITTLE, M.D., died at his home in Whiting, May 16, following a two-weeks' illness from rheumatism and pneumonia, aged 33 years. Dr. Doolittle was a member of the last graduating class of the old Fort Wayne College of Medicine (1905), practiced one year in Fort Wayne and since that time has continued the practice of medicine in Whiting.

W. B. RICHMOND, M.D., of Terre Haute, died very suddenly of heart failure while attending church, May 10, aged 38 years. Dr. Richmond had been in ill health for some time and unable to engage actively in his practice. He was formerly a member of the city board of health and a member of the Vigo County Medical Society and the Indiana State Medical Association.

H. O. KING, M.D., died at his home in Kendallville, May 5, after a lingering illness from spinal trouble. Dr. King was born near Kendallville in 1851, received his early education in the Noble County schools, graduated from the Detroit Medical College in 1876 and took a postgraduate course at the Rush Medical College, Chicago. He was a member of the Noble County Medical Society and the Indiana State Medical Association.

JOHN B. THOMAS, M.D., died May 20 at the home of his sister in Wabash at the age of 26 years. Dr. Thomas graduated from the Indiana University School of Medicine in 1909, was a member of the Indianapolis city dispensary staff for two years, and practiced medicine in Indianapolis until his health compelled him to go West where he has since held the position as house physician at the Beth El Hospital at Colorado Springs.

NEWS NOTES AND PERSONALS

INDIANAPOLIS

DR. G. B. JACKSON has been appointed to succeed Dr. M. J. Spencer on the Indianapolis Board of Health.

DR. BOYLES was recently appointed assistant to Dr. Shimer in the Laboratory of the State Board of Health.

DR. HENRY ALBURGER of Indianapolis has resigned his position as professor of pathology of the Indiana University School of Medicine.

A CONVENTION of all the health officers in the state was held at Indianapolis, May 26 and 27, under the auspices of the State Board of Health.

DR. HOMER H. WHEELER of Indianapolis is taking a postgraduate course at Johns Hopkins Hospital and will return home about the middle of July.

DR. NATHAN P. GRAHAM has recently returned from a trip to Los Angeles, California, where he went to accompany his mother to her home in Madison, Ind.

DR. WALKER, at the end of a year's service as Intern at the City Hospital, has gone to East Ely, Nev., to take a position as assistant surgeon in the hospital of a mining company.

DR. H. G. MORGAN, secretary of the City Board of Health has recently returned from an eastern vacation trip including New York, Boston, Washington and Chattanooga, Tenn.

DR. THOMAS B. EASTMAN has been appointed a member of the Indianapolis Board of Health to fill the place of Dr. Moses Thorner, who has left recently for Los Angeles, Cal., where he will continue his practice.

DR. JOHN THRASHER, assisted by Dr. Charles Humes, Dr. Shipp and Miss McCoy, have recently returned from the Michigan City state prison, where they administered the Wassermann test for syphilis to some 200 of the inmates of that institution.

DR. G. B. JACKSON, 3140 North Delaware street, has been appointed a member of the City Board of Health to succeed Dr. Mavity J. Spencer, whose term expired the last of the month. He was appointed as a Democratic member. A meeting of the board will be held soon to elect officers.

THE State Board of Health under the direction of Dr. J. N. Hurty has recently conducted a two days' meeting for the benefit of the county and municipal health officers, of whom there were about 200 present. They were the guests of the Indianapolis Medical Society at a clinic given at the City Hospital, Tuesday evening, May 26.

THE resignation of Dr. Moses Thorner as a member of the Board of Health was accepted by Mayor Bell. Dr. Thomas Eastman was named as his successor. Dr. Thorner and family have moved to California, and it is understood he will

practice medicine in Los Angeles. Dr. Eastman was appointed immediately and has assumed the duties of his office. His term will expire June 1, 1916.

THE dedication of the new Robert W. Long Hospital occurred June 15. The principal address was made by Dr. Henry S. Pritchett, president of the Carnegie Foundation, his subject being "Medical Education and the State." At this meeting, which was held at 2.30 in the afternoon in the House of Representatives in the State House, the hospital was formally presented by Dr. Long to the state and accepted by Gov. Ralston. In the evening a banquet was held at the Claypool Hotel, and speeches were made by Gov. Ralston, Mayor Bell, Dr. Bryan and Dr. Pritchett. Alumni of Indiana University School of Medicine, the trustees and many guests were present. The dedication of this hospital marks an epoch in the history of medical education in Indiana. It forms the nucleus of what will inevitably become a well-established medical center of great merit. Although made possible by the generosity of an Indianapolis physician, the hospital is peculiarly and in every sense a state institution, and thereby entitled to the support of every doctor in the state. The function of the institution is primarily for teaching, which at the same time guarantees that the services rendered the sick poor of the state will be of the very highest quality, because efficiency based upon rational conservatism must be the key-note of all medical instruction.

GENERAL

DR. A. R. KRESLER of Rensselaer is taking postgraduate work in Chicago.

THE Plymouth Sanitarium and Hospital has recently gone into the hands of receivers.

DR. BINE WHITLACH of Osgood is taking a three weeks' postgraduate course in Chicago.

DR. LLOYD SHOLTY of Wabash was married, June 7, to Miss Catherine McMahan of Huntingburg.

DR. J. H. BARNFIELD of Logansport has been elected president of the Logansport Commercial Club.

DR. G. E. CECIL has returned to his home in Aurora after taking a postgraduate course in St. Louis.

DR. D. D. ROSE, of Valparaiso, was married at Black Lick, Pa., May 6, to Mrs. Anna E. Mallory, of that place.

DR. MARC BOND has resumed his practice in Aurora after a forced absence for some time due to sickness.

DRS. L. A. WILSON and F. V. Martin of Michigan City have been attending clinics at the Mayo Hospital, Rochester.

DR. IRA PERRY, formerly of Bippus, has located at North Manchester and will continue the practice of medicine.

GRADUATING exercises of the Epworth Hospital, South Bend, were held May 8, and five nurses received diplomas.

THE Northern Tri-State Medical Association will hold its forty-first annual meeting at Lima, Ohio, July 14, 1914.

DR. G. W. H. KEMPER of Muncie has recently been honored in being elected medical director of the Indiana G. A. R.

DR. and MRS. M. V. YOUNG have returned to their home in Frankfort after spending the winter at Daytona Beach, Fla.

DR. FRANK MAXWELL of Martinsville has been spending a month at the Mayo Hospital, Rochester, Minn., attending clinics.

THE Gary Medical Society is making arrangements for the establishment of a medical library section in the Gary Public Library.

DR. FRANK A. MAY, who for the past four and a half years has practiced medicine at Hardinsburg, Ind., has located at LaFayette.

A NURSES' training school, consisting of a three years' course, has been established in connection with the Dukes' Hospital at Peru.

DR. E. R. CRAVENS, of Linton, is taking a trip through the West. He will visit Hot Springs, Ark., and different points in Oklahoma and Texas.

DR. J. S. BOYERS of Decatur has been quite ill in the Hope Hospital, Fort Wayne, but is now much improved and able to resume his practice.

DR. JOHN D. STEWART, formerly of Indianapolis, left June 1 for New York City, where he will open an office and devote his time to surgery.

A BILL has been passed by the General Assembly of Maryland and signed by the governor calling for a Board of Osteopathic Examiners in that state.

DR. A. A. SWOPE of Crawfordsville is rapidly recovering from an operation which he recently underwent at the Mayo Hospital, Rochester, Minn.

THE Rockefeller Institute for Medical Research has recently received an additional endowment of \$1,000,000 from John D. Rockefeller.

ST. JOSEPH HOSPITAL, South Bend, has just installed a new Scheidel-Western x-ray machine, worth \$2,000, the gift of a Mishawaka business man.

DR. NATE HATFIELD, who for the past eighteen months has served as house physician in Bellevue Hospital, New York City, has located at Greentown, Ind.

DR. JAMES Y. WELBORN, of Evansville, sailed June 13 for Europe, where he will attend clinics, and will attend the Congress of Surgeons as Indiana delegate.

DR. I. W. SHORT of Elkhart was elected president of the Lake Shore and Michigan Southern Railroad Surgeons' Association at their recent meeting in Toledo.

PLANS for the construction of a four-story, fire-proof addition to Hope Hospital, Fort Wayne, are under way, and work will probably be started in the fall.

DR. JOHN LOOMIS of Jeffersonville celebrated the ninety-fourth anniversary of his birth on May 18. He has been a practicing physician in Jeffersonville since 1861.

DR. H. E. ALLEN, formerly of Clark's Hill, has accepted a government position at the Indian Agency at Omega, Minn., and has moved with his family to that place.

THE Chicago Medical Society has undertaken to raise \$25,000 for the erection of a monument in Lincoln Park in memory of the eminent Chicago surgeon, Dr. Nicholas Senn.

DR. D. W. WELCH of Mt. Vernon spent several weeks in Indianapolis and Chicago attending clinics, and on his return home he spent several days in the sanitarium at Battle Creek.

DR. WILLIAM H. WEBB and wife of Adams celebrated their sixtieth wedding anniversary on May 11. Dr. Webb has practiced medicine at Adams since 1860 and is now 88 years old.

DR. WILLIAM HALLOCK PARK has been appointed dean of the University and Bellevue Hospital Medical College to fill the vacancy caused by the death of Dr. Egbert LeFevre.

DR. CHARLES W. ASHLEY, who for the past nine years has had charge of the surgical department of the Thomas Dee Memorial Hospital at Ogden, Utah, has located at Vincennes, Ind.

DR. GEORGE D. KAHLO, of White Sulphur Springs, West Virginia, has recently been appointed a member of the Faculty of the Johns Hopkins University, holding the chair of Hydrotherapy and Balneology.

ON May 17, Dr. Arthur E. Burkhardt of Tip-ton sustained a fractured tibia four inches above the ankle as a result of a horse falling on the limb. He is now under treatment at the Methodist Hospital, Indianapolis.

THE seventeenth annual commencement of the Union Hospital Training School for Nurses at Terre Haute was held May 25, four nurses receiving diplomas. Dr. W. N. Wishard of Indianapolis delivered the principal address.

DR. THEOBALD SMITH, now professor of comparative pathology in the Harvard Medical School, has accepted the position of director of the new department of animal pathology in the Rockefeller Institute for Medical Research.

THE death-rate for the United States for 1913 was 14.1 per thousand, which is an increase over 1912 (13.9), but less than 1911 (14.2) and a marked decrease over the average rate for the five-year period previous, or from 1901 to 1905, which was 16.2.

THE May Bulletin of the St. Joseph County Medical Society reproduces an excellent picture and biographic notice of Dr. Lehman H. Dunning, at one time a resident of South Bend, and later a well-known surgeon of Indianapolis, who died Jan. 4, 1906.

DR. A. F. MALLOY, who formerly was a practicing physician in Bridgeton, Ind., but who for the past twelve years has been in Spokane, Wash.,

on account of his health, has opened an office in Rockville, Ind., and will engage in the practice of medicine at that place.

DR. S. E. SMITH of Richmond was elected president of the American Medico-Psychological Association at its recent meeting, held in Baltimore, Md. Other officers are Dr. E. N. Brush of Baltimore, vice-president, and Dr. Charles G. Wagner of Binghamton, secretary-treasurer.

DR. W. C. VAN NUYS, superintendent of the Indiana Village for Epileptics at Newcastle, attended the annual convention of the National Association for the Study of Epilepsy and the Care and Treatment of Epileptics at Baltimore, recently. Mrs. Van Nuys accompanied him.

THE United States Congress has been requested to appropriate \$17,000 for a pellagra hospital to be erected in some southern city. If obtained, the hospital will be equipped with all facilities deemed necessary by the United States Public Health Service to make an investigation of the disease.

SURG.-GEN. William C. Gorgas, United States Army, has been awarded, by the American Museum of Safety, a gold medal in recognition of his achievements in cleaning up the Canal Zone and freeing the country of the fever and pestilences which had previously made engineering work almost impossible.

ANNOUNCEMENT is made of a gift of \$1,000,000 to Wesley Hospital, Chicago, by James Deering. The gift is an endowment fund to the hospital and is to be used exclusively for the care of charity patients. In accepting the gift the trustees voted to change the name of the institution to the Wesley Memorial Hospital.

THE Fort Wayne Medical Society is cooperating with the First Presbyterian Church of that city in the establishment of a milk dispensary for the entire summer in an effort to reduce infant mortality. A physician and trained nurse will be present at certain hours each day to examine the babies and prescribe the correct food.

UNITED STATES Surgeon-General Gorgas was given a dinner on March 23 by the medical profession of London, England. The dinner was a tribute to General Gorgas' work as chief of the Sanitary Department of Panama. While in Eng-

land, General Gorgas had conferred on him the degree of Doctor of Science by Oxford University.

DR. G. M. GUITERAS of the Public Health Service has been called to Tampico, Mexico, to investigate the sanitary situation fully and make recommendations to remedy the many evils he will no doubt discover. Tampico is believed to be a breeding ground for many tropical conditions, especially yellow fever, small-pox and malaria.

THE foundation stone for the new School of Tropical Medicine at Calcutta, toward which the government of India has appropriated \$195,000, was laid recently by the governor of Bengal. The institute will accept students from all over the world, and it is hoped that students of medical research institutions of the United States may be sent there for study.

THE annual meeting of the Sixth District Medical Society was held at Greenfield, Indiana, May 14, and elected the following officers for the ensuing year: President, Dr. L. F. Ross, Richmond; secretary-treasurer, Dr. H. W. McDonald, Newcastle; councilor, Dr. O. J. Gronendyke, Newcastle. The next meeting will be held at Liberty, Indiana, the fourth Thursday in May, 1915.

DR. JOHN E. DOERR of Mt. Vernon and Dr. Beecher Knapp of Evansville left May 21 for Europe, where they will meet Dr. Carl Viehe of Evansville who, with his wife, has been in that country for several months, and proceed to attend the clinics in Berne, Paris and London. They will attend the Clinical Congress of Surgeons in London and expect to return home about September 1.

THE JOURNAL believes that merchants and manufacturers of foods, shoes, automobiles, clothing, furnaces and the thousand and one things bought by physicians for themselves, their offices and homes, could advertise all these things successfully to the physicians of Indiana. It will be an advantage to our readers as well as the advertiser. We are interested in securing the best there is, in all lines, for our readers.

DR. S. E. SMITH, superintendent of the East-haven hospital for the Insane at Richmond, was elected president of the American Medico-Psychological Association at their recent meeting at Baltimore. At this session this Association went on record as opposed to legislation which

will restrict marriage too closely, inasmuch as such laws tend to encourage illegitimate unions and will result in eventual disregard of married state.

SECRETARY HOUSTON, of the Department of Agriculture, has announced that after May 1, 1915, manufacturers and packers of foods will not be permitted to use the phrase, "Guaranteed under the food and drug act." The reason assigned for the change by the Federal Food Inspection Board is that the guarantees have been used to mislead the public into believing that food and drug articles so distinguished have been passed upon and certified by the government.

THE trustees of Stanford University have approved the plan for a graduate course in medicine to be given during the summer months. In offering this work the trustees and the medical faculty are endeavoring to open to the general profession during vacation the clinical material and the laboratory and hospital facilities enjoyed by the regular Stanford medical students during the college semesters. No certificates or university credits will be given for attendance at these courses.

AT the meeting of the American Medical Association, to be held in Atlantic City June 22 to 26, the H. K. Mulford Company will exhibit motion picture films showing the different processes employed in the production of antitoxins, bacterins, vaccines and curative serums. The films will show not only the laboratory methods used but also the actual application of these preparations from the clinician's standpoint. A short description will also be thrown on the screen before each process is shown, describing the picture so that they bear their own explanation.

THE United States Civil Service Commission announces an open competitive examination for assistant epidemiologist, men only, to be held July 6, 1914. The duties of this position will be to conduct laboratory studies of disease, to make epidemiological surveys to determine the prevalence and causation of epidemics, and to recommend measures to prevent and control outbreaks of disease. The position pays from \$2,000 to \$2,500 per year. There will also be an examination for bacteriologist, men only, on July 8. The duties of this position will be to examine bacteriologically food products which are subject to the food and drugs act in order to determine their sanitary condition. The salaries paid in this position range from \$1,200 to \$2,000.

SINCE publication of the list in the May issue of this Journal, the following articles have been accepted for inclusion with New and Nonofficial Remedies:

Arlington Chemical Co.:

Arleo Urease.

Comar and Cic:

Electrargol.

Franco-American Ferment Co.;

Lactobacilline Tablets; Lactobacilline Liquide, Culture A; Lactobacilline Liquide, Culture D; Lactobacilline Liquide, Infant Culture; Lactobacilline Glycogene Tablets; Lactobacilline (Glycogene Liquide); Lactobacilline Milk Tablets; Lactobacilline Milk Ferment; Lactobacilline Suspension.

H. K. Mulford Co.

Culture of Bulgarian Bacillus, Mulford.

E. R. Squibb & Sons:

Tetanus Antitoxin, Squibb, 5,000 units.

Wm. R. Hubbert:

Diphtheric Antitoxin, Hubbert.

Having been advised that Diphtheric Antitoxin, Hubbert, was no longer on the market the Council directed that it be omitted from future editions of New and Nonofficial Remedies.

Riedel and Co.:

Hexalet.

At the request of the manufacturer the name Hexal in New and Nonofficial Remedies has been changed to Hexalet.

THE following bequests and donations have recently been announced:

Germantown Hospital and St. Luke's Hospital, Philadelphia, each \$5,000; Chestnut Hill Home for Consumptives, \$2,000, by the will of Elizabeth B. Jeffries.

Associated Jewish Charities of Chicago, \$1,000, and Chicago Home for the Friendless, \$500, by the will of Henry Grenebaum.

Elkins Memorial Hospital, Abingdon, Pa., a gift of \$5,000 for the endowment of a room in memory of John Wilton Celdon, Jenkintown.

Medical Department of the University of Cincinnati, \$30,500 in municipal bonds and \$900 in cash, to be known as the Thomas Gibson Medical Endowment Fund, being the residue of the estate of Francis W. Gibson.

New Orleans City Hospital, \$8,000, by an anonymous donor for a modern annex, to be devoted entirely to tuberculosis patients.

Hospital for Deformities and Joint Diseases, New York City, \$25,000; Presbyterian, Mt. Vernon and Episcopal Hospitals, each \$20,000, by the will of Mrs. A. Gertrude Cutter.

Cancer Hospital, and Little Sisters of the Poor, New York City, each \$1,000 by the will of Mary F. Kennedy.

New York Foundling Hospital and St. Vincent's Hospital, New York City, each \$2,160, by the will of Mary Guerin.

Federated Orthodox Jewish Charities, Chicago, a donation of \$1,000 by Samuel Phillipson.

Albany (New York) Medical College, \$5,000, by the will of Sylvester McDonald.

THE CLINICAL COLLEGE OF SURGEONS OF NORTH AMERICA. —The Fifth annual session of the Clinical Congress of Surgeons of North America is to be held in London, England, the last week of July. At that time a notable gathering of surgeons and surgical specialists will be in London to witness the British surgeons as they exhibit their surgical skill in their accustomed environment and in their own institutions. The headquarters of the Congress are at the Hotels Cecil and Savoy, located side by side in the hospital center of London. Here will be found the registration rooms, exhibition halls and evening meeting rooms. These two hotels have a combined capacity for more than fifteen hundred guests, and are located within a stone's throw of many other well-known London hotels.

Surgeons on reaching London should proceed at once to the headquarters, register and receive their membership cards and tickets which will admit them to the evening meetings and clinics. The registration fee is \$5.00, and those who prefer to do so may register in advance and receive their credentials by sending the amount of the fee to the General Secretary, Clinical Congress of Surgeons, 30 North Michigan Avenue, Chicago, before July 1.

At the Hotel Cecil will be bulletined the clinics in general surgery, gynecology and obstetrics, genito-urinary surgery, orthopedics, x-ray and laboratory demonstrations; at the Savoy, the clinics and demonstrations in surgery of the eye, ear, nose and throat. The program for Monday, July 27, will be bulletined on Saturday afternoon, July 25, two days before the opening of the congress, and on the afternoon of each day of the session a complete, accurate program of the clinics and demonstrations to be given on the succeeding day will be posted on the bulletin board.

Any physician or surgeon legally qualified to practice surgery in his community may become a member of the Clinical Congress by registering at any annual meeting and paying the registration fee.

Reserved tickets for all clinics and demonstrations, properly numbered and couponed, corresponding to the capacity of each operating room, will be issued, and booths will be established at headquarters where these tickets may be secured. A tentative program will be furnished about July 1 to all prospective attendants of the congress who apply for the same. From this program one may make his selection of the clinics he wishes to attend and send a written request for reserved tickets to Mr. A. D. Ballou, General Manager, 1 Wimpole Street, London, West, stating definitely for just what clinics the tickets are desired. These tickets will be retained at headquarters up to a certain fixed time—to be determined and announced later—in the name of the applicant, and will be assigned as nearly as possible in order of application. That the applicants may not be disappointed if the tickets for their first choice are exhausted, several selections should be made.

Each surgeon who desires to attend the clinics and evening sessions must register at headquarters and secure membership card. Admission to all clinics and evening sessions will be limited strictly to members of the congress on presentation of such membership cards. Evening meetings will be held simultaneously in two halls; the general surgical program to be given in the grand hall of the Hotel Cecil, and the program of the specialties, surgery of the eye, ear, nose and throat, and oral surgery in the ball room of the Hotel Savoy. The principal papers are to be read by the visiting surgeons, and a time limit of twenty-five minutes has been fixed. The papers will be discussed by London surgeons, and the discussions limited to ten minutes each.

It has been the policy of the Clinical Congress of Surgeons to discourage large entertainments of a social nature, as there is no proper time for social functions. In London, as in other large cities, there is much of general interest in the way of theaters, museums and art galleries which afford entertainment for those seeking occasional recreation and for the accompanying ladies.

It is urged that accommodations for going and returning passage be arranged for at the earliest possible date. The transportation manager, Mr. J. P. McCann, Marbridge Bldg., New York City, is in a position to obtain excellent accommodations on any of the leading steamship lines at rates that will suit the financial requirements of the inquirer. Reservations can be made on some of the late sailing fast steamers whereby a surgeon may attend the congress and return with the loss of but three weeks' time. A special reduction of 25 per cent. to members of

the Clinical Congress and their immediate families is being made by a number of steamship lines, full particulars concerning which may be obtained from the transportation manager. While there will be no difficulty in securing hotel accommodations somewhere in London during the week of the congress, it is advisable to make reservations early.

CORRESPONDENCE

CHRISTIAN SCIENCE

INDIANAPOLIS, April 8, 1914.

To the Editor:—Your issue of March comments upon and considerably amplifies an editorial in *The Journal A. M. A.* of February 7, which latter editorial criticizes the *Christian Science Monitor* for its quotation of a part of the statements of Dr. Edward R. Baldwin in his lecture on the subject of tuberculosis. It is but just that you permit me to call attention to the following item of explanation which appeared in the *Monitor* on February 4, three days before *The Journal A. M. A.* accused the *Monitor* of unfair or deliberate misrepresentation, rendering such accusation inexcusable. The *Monitor* article reads as follows:

“QUOTATION OF DR. BALDWIN IS GIVEN IN FULL

“The *Christian Science Monitor* is in receipt of a letter from Dr. Edward R. Baldwin, whose views regarding tuberculosis were referred to recently in this paper. Dr. Baldwin states that only a portion of his observations on the alleged infectious nature of tuberculosis were quoted by the *Monitor*. It is hardly necessary to assure Dr. Baldwin that we had no intention of misrepresenting him, and we cheerfully print his words in *The Journal*, just as he wishes us to publish them, as follows:

“‘Finally, as a corollary, adults are very little endangered by close contact with open tuberculosis, and not at all in ordinary association. Childhood is the time of infection, youth the time of superinfection, and that from extension of the primary disease. Qualify these statements as we may, it is time for a reaction against the extreme ideas of infection now prevailing.

“‘There has been too much read into popular literature by health boards and lectures that has no sound basis in facts, and it needs to be dropped out or revised. More protection of children and better hygiene for adults are logically demanded, but beyond this the preachments about the dan-

ger of infection to adults in the present state of society are without justification from an experimental standpoint!’”

The foregoing full quotation of Dr. Baldwin's remarks, as given by *The Journal A. M. A.* does not appear to very greatly strengthen the case for the alleged infectious nature of tuberculosis, but will, we trust, serve to show that the editors of the *Christian Science Monitor* are glad to correct inaccuracies, however slight, that may find their way into that paper.

Those who have read the editorial in *The Journal A. M. A.* of January 3 on the subject of “Phthisiophobia,” which embodies the statements of Dr. Baldwin and the editorial in the *Christian Science Monitor* of January 23, commenting thereon, will have discerned that the evident purpose of *The Journal A. M. A.*, the *Monitor*, and of Dr. Baldwin was to allay the public fear of tuberculosis. Certainly this was a worthy aim, which will be approved by most people, whatever their beliefs on the subject of disease.

Further editorial comment in this same issue of your JOURNAL makes dire and gruesome canvas of purely imagined possibilities to develop from the now assured exemption of Christian Scientists under the new Massachusetts statute regulating the practice of medicine. Here again it is but just that we be given opportunity to call attention through your columns to some salient points overlooked to the unjust disadvantage of Christian Science.

In the first place your writer signally overlooks the fact that Christian Science has been practiced throughout the good Commonwealth of Massachusetts for years past and so successfully that the very center of Christian Science activity has become established there, a fact in itself clearly refuting such claim as to dire results of the practice of the system in any community.

The citation of one or two alleged but not clearly designated or verified “failures” of Christian Science in the face of an uninterrupted period of continuous and conceded healing of all manner of diseases including so-called surgical cases in all parts of the civilized world during almost half a century is but poor argument. Couple with this the further fact, verified by figures, indicating that full 70 per cent. of those who apply for Christian Science have failed to receive benefit from different schools of materia medica, despite which fact approximately 90 per cent. of those thus applying to Christian Science are either healed or permanently benefited, and we have some argument “on the other side.” These results are uniform and actual statistical

reports have repeatedly indicated that the death rate among Christian Scientists is much lower than that among other classes, and this again in spite of the fact that the majority of those constituting the Christian Science body were recruited from the ranks of the dying. This latter fact might almost legitimately be a source of anxiety among undertakers, but should certainly be a source of rejoicing among reputable medical practitioners, as such results but supplement their own earnest effort along lines both of curative and preventive medicine.

Sincerely,

R. STANHOPE EASTERDAY.

Answer:—Distortion and perversion of facts is not uncommon with the Christian Science *Monitor*, and the effort to create a false impression by misquoting Dr. Baldwin's statements is but another evidence of the manifest intent to profit by methods that to say the least are not in keeping with what is expected of a sect that has "Christian" as a part of its name. No particular credit is due for the tardy publication of a corrected quotation, at the request of Dr. Baldwin, for it has not altered the principle involved.

Concerning the failures of Christian Science, which our correspondent says are not verified, we desire to say that we shall take great pleasure in furnishing particulars concerning not only two cases but many more if our correspondent really desires the evidence. The coroner and physicians in practically every community where Christian Science healers hold forth can testify concerning deaths under Christian Science treatment, and in innumerable instances of deaths from diseases that under appropriate treatment are not considered fatal. Among fatal cases occurring under Christian Science treatment will be not a few cases that previous to the signing of the death certificate were heralded by Christian Scientists as wonderful "cures." And then concerning the oft-reported statement that so many cases of so-called incurable diseases have been cured by Christian Science, we desire to offer the rejoinder that in nearly all such instances the diagnosis has been made by the patient or by Christian Scientists, and not by reputable scientific physicians. There have been analyses of a large number of Christian Science "cures," and in practically every instance the facts disproved the statements made by the Christian Scientists that serious pathologic conditions existed, and wherever it was shown that such conditions did exist it was also shown that in the usual course of time the undertaker had a job just the same, and usually a little earlier than

would have been the case had the disease received rational attention. The statement that 70 per cent. of those who apply for Christian Science treatment have failed to receive benefit from different schools of medicine should be discounted if subjected to scientific analysis. That the death-rate among Christian Scientists is lower than among other classes is also open to question, for in this as in many other questions the Christian Science records, the only ones available, must be accepted, and experience shows that Christian Science records are not trustworthy.

If Christian Science will do what its votaries claim for it, then it will restore the sight to those who are blind from cataract, glaucoma or other pathologic changes; it will obviate the necessity of wearing glasses to correct optical errors; it will restore the hearing to those who are deaf from pathologic causes or mechanical interference with the sound conducting apparatus; it will restore health to that great army of sufferers from inoperable malignant disease; it will prevent death from poisons taken intentionally or accidentally; in short, it will do away with disease and physical distress of every kind, and carried to its logical conclusion, there will be no occasion for death except by violence. If the Christian Scientists individually or collectively can restore sight, hearing, muscular and nervous activity, or health in any one of a half dozen conditions that we recognize as permanent unless subjected to rational treatment, and will prove it (we will furnish the cases), then we will acknowledge that it is useless to maintain medical schools and hospitals, blind asylums or epileptic colonies, or to establish quarantine laws and other means of protecting the people from cholera, small-pox, yellow fever, scarlet fever, diphtheria and other communicable diseases. We will also denounce the practice we are now following of utilizing drugs, surgery or other mechanical measures for the relief or cure of innumerable conditions that indisputable evidence shows have been benefited by the practices we uphold. We will accept the truth, but we want the truth and not a mass of visionary and unsupported theories.

The fact of the matter is that Christian Science is neither Christian nor science. It is antichristian, as its teachings are in conflict with the teachings and practices of those who conscientiously believe in the Bible, and there isn't a particle of science in it. It does not recognize the laws of physics, physiology or pathology, and it makes deductions which cannot be sustained by scientific tests nor upheld by proofs which carry more weight than any seeming contradic-

tions. It is the deification of ignorance, and would set aside all the indisputable facts of nature for a vague and intangible theory that no Christian Scientist has ever been willing to have put to test. It places all diseases in the class with those that are imaginary or emotional, and it makes the fatal mistake of ignoring facts founded on incontrovertible proof, and substituting therefor a theory that has no substantiation when put to all the tests that it should pass if worthy of acceptance in time of dire physical distress.

In defense of the theory many of its supporters have either resorted to deception and trickery, or else they have deluded themselves with monumental errors which have worked disastrously for some who have blindly followed the leaders.

Medical men recognize in Christian Science nothing more than the creation of a cheerful optimism which has its beneficial effect in the treatment of all diseases. Without blare of trumpets they are daily accomplishing cures by suggestive or other means that are allied to the Christian Science method of creating optimism, but they are not so irrational as to believe that such methods are applicable to diseases of any form and from whatever causes. They do not pretend to be infallible in the production of results, but they are perfectly willing to have the sum total of their work analyzed, and their theories put to any reasonable test to prove the truth or fallacy of their contentions. We invite the Christian Scientists to do the same.—EDITOR.]

A MESSAGE FROM AN INDIANA MAN AT LOS ANGELES

LOS ANGELES, May 19, 1914.

To the Editor.—For many months I have contemplated writing a letter through THE JOURNAL to my friends of the Indiana State Medical Association. I have postponed doing so until this time and for more than one reason.

One must sojourn for quite a period of time in a community to secure a good perspective, and acquaint one's self with conditions. One's first blush of enthusiasm or criticism may often lead far afield. Every few days I receive letters from friends asking about the medical situation in California. The letters are, as a rule, from good men. Many express themselves as unhappy in their location, either from climatic conditions or unfortunate medical surroundings.

Mr. Dundas Grant once said to me that London was most interesting because of the opportunity of meeting physicians from every country

in the world, who sooner or later came to visit Gray Inn Road Hospital. Los Angeles is interesting to me professionally because of the character of the people who come to me. Most of them are of the well-to-do class, much traveled and sometimes educated. Wealth, I have discovered, falls in unexpected places and to no one class of people.

Los Angeles is growing at the rate of about 50,000 a year, and now has at the lowest estimate 450,000 people. The city has a daily floating population in addition of probably 50,000. Among this number will be found many requiring medical attention. Some will tell you that a practice among floaters is unsatisfactory for the reason that they soon pass from under one's influence. The same may be said of a staid community, for doctors to-day have about the same relation to the community as a dry goods store. In other words those offering the best inducements get the business. In cities especially, one cannot form a close acquaintance with but few of the many who come to consult them and patients turn from one physician to another. Nowadays, we have little loyalty among medical men and life, as of old, resolves itself into a survival of the fittest.

We have probably more than a hundred men claiming to be specialists in the eye, ear, nose and throat in Los Angeles alone. The bulk of business, however, is done by about twenty men, and among these, three or four stand out as distinctly successful. The ability of the men taken as a whole ranks very high and will compare with any city of its size.

The Los Angeles County Medical Society has a total membership of 600 and meets every fortnight. Two or three papers are usually presented and afterward a collation is served. No medical meeting in this country is complete without a few things to eat and good things to drink. The dues are fifteen dollars per year. Included, however, is a protection against malpractice suits. The County Hospital has a capacity of 1,000 beds and those frequenting it are of all nations. The staff is composed of the faculty of the two medical colleges.

Los Angeles has two regular medical colleges; one called the medical department of the University of California, affiliated with the university at Berkeley, and teaching two years; and the other the College of Physicians and Surgeons, affiliated with the University of Southern California. The first school possesses a very fine faculty, but only a very few students, less than five; while the College of Physicians and Surgeons has 160 students and a very good faculty.

What the College of Physicians and Surgeons lacks now is a large endowment, which seems to be essential for a class A college. I am reminded sometimes of the days in Indianapolis when we had two colleges and knocked this and that fellow because he was fortunate enough to belong to one or the other faculty.

From its geographical situation and clinical facilities, Los Angeles has every right to be a great and honorable medical center. In this state the regular school of doctors has run riot on higher medical requirements and education, with the effect of driving the aspiring young men, who in the past filled our medical colleges, to the irregular school and especially to the osteopathic school. In Los Angeles there are over four hundred students in the different schools of osteopathy. The public are gradually being educated to the view point of the osteopath and other sects in medicine, and we of the regular school are doing our best to eliminate ourselves as influential members of the body politic. After all the public controls medical affairs, and as we lessen our members we lessen our influence. Strong men will always forge to the front regardless of the school of medicine from which they graduate. Since the medical reciprocity law has gone into effect there has been a wonderful influx of doctors to California. And the supply probably exceeds the demand. Even with the over-supply the exceptional man has a better opportunity of making good in a short time than in any other state in the Union. The influx of new people is so great that a fortunate start in medicine may land the new man to the front in a short space of time.

It is claimed by some that the practice of medicine in southern California is too much commercialized for the good of the community; brought about in a large degree by the formation of hospital corporations. The dividends in some cases are enormous and have reached, I am told, as high as 100 per cent. Commercialism of medicine, however, seems to be a vice in all cities. The exigencies of the times, high cost of living, tax for this and that and extravagant laws such as the referendum and recall all tend to chain one to the pursuit of the dollar. In California we have all kinds of elections and at any time of the year. When a bunch of political grafters are hard up or some few are disgruntled at a public officer, a recall election is declared and at an enormous expense to the community. About 20 per cent. of all the voters ever respond at any of the elections. I hope Indiana doctors will oppose any freak legislation such as the referendum and recall.

Fee-splitting, under one guise or another, has a hold on some of the profession here as in Indiana. We have our quota of men, as all other cities have, who are exemplary physicians and surgeons. The cry of greed and pangs of hunger are as great here as in Fort Wayne or Indianapolis and many are forced to do things in surgery that under fortunate circumstances would be referred to more competent men.

The influence of the Mayo school is very great in Los Angeles, and many try to imitate the justly celebrated clinic. The effect, as far as the public is concerned, is bad. The man who tries to do everything in medicine or surgery generally does no one thing well. Many physicians patterning after the Mayos try to form combinations, which as a rule act to circumscribe one's progress and ultimately eliminate the progressive young men who, working independently, would become well known to the profession.

The men in the West are, advisedly speaking, a little more up to date than in my home state. Most of them are young men and have had good training in eastern schools. The life in the Rocky Mountain and Pacific Coast states has a tendency to make them liberal, hospitable and self reliant. There is more comradeship here among the profession than in Indianapolis and little knocking among the members of my specialty. There is work enough for all and no one man is trying to do all the business. Most of the fellows try to get good fees and stand by one another.

My friends in Indianapolis and surroundings expressed surprise when I gave up a large business and an enviable college and hospital position to begin life over again and far from a good "base of supply." It is a far cry from Indianapolis to Los Angeles, but not so far but what reputation follows fleet of foot across desert and mountain. Before I had time to adjust myself business began to accumulate. During my first winter hardly a week passed but what one or more Hoosiers called either to consult me or to pay his respects.

The cost of living here, as in all Pacific Coast cities and towns, is very high. Climate is the great asset of California. We are twelve miles, as the bird flies, from the ocean and less than that from the mountains, snow-capped in winter. The roads are a revelation and recreation comes natural. Physicians anticipating coming to the exposition at San Francisco should, if possible, arrange to see the state by automobile. The trip of five hundred miles can be made from San Diego to San Francisco on a road as smooth as the best street in Fort Wayne or Indianapolis.

I hope many of the Indiana physicians will take advantage of the rates to the Panama Exposition next year and see first hand something of the charm of California.

Cordially,

JOHN J. KYLE.

SOCIETY PROCEEDINGS

TENTH DISTRICT MEDICAL SOCIETY

Tenth District Medical Society met at Valparaiso, May 5, and elected the following officers for the ensuing year: President, Dr. J. E. Metcalf, Gary; vice-president, Dr. T. J. Wilcox, Hammond; secretary-treasurer, Dr. A. P. Letherman, Valparaiso; counselor, Dr. O. B. Nesbit, Valparaiso.

Dr. C. H. DeWitt of the University, gave an illustrated lecture on the subject of "Carcinoma or Cancer," using a large number of slides graphically displaying the progress of this disease.

Dr. B. H. Orndoff of Chicago, read a paper on the "Serological Diagnosis of Pregnancy," an up-to-date synopsis of the advance along that line of work.

Dr. D. A. Buck of LaPorte, talked on "Some Considerations Conducive to Higher Citizenship," showing that the physician should be in advance along all lines.

Dr. J. E. Metcalf of Gary, presented a paper on "Management and Care of Labor," which aroused considerable discussion.

Dr. A. M. Stober of Chicago, gave an illustrated lecture on "Blastomycosis."

Next meeting to be held at Hammond in August.

Adjourned. O. B. NESBIT, Secretary.

THE TWELFTH DISTRICT MEDICAL SOCIETY

The Twelfth District Medical Society was called to order with President McKinney in the chair, 1:30 p. m., April 8, 1914, in assembly room, Fort Wayne; on the absence of Secretary Rawles, Dr. Porter, Jr., was asked to fill the chair until the arrival of the regular secretary.

The reading of the minutes of the previous meeting was dispensed with. The first on the program was the election of officers for the ensuing year, and resulted as follows: President McKinney was reelected; first vice-president, Dr. L. P. Hoffman; second vice-president, Dr. Swartz; secretary-treasurer, Dr. M. E. Porter, Jr.

The following resolutions were then read by Counselor Dr. E. E. Morgan, the same being a copy of the resolutions adopted by the Chicago Medical Society in regard to the Nelson amendment to the House bill No. 6282, known as the Harrison Anti-Narcotic Bill. The resolutions were adopted as read:

WHEREAS, House Bill No. 6282, otherwise known as the Harrison Anti-Narcotic Bill, has passed the House and is in the Senate at Washington.

WHEREAS, Said bill as passed by the House was satisfactory to the profession.

WHEREAS, An amendment has been offered by Senator Knute Nelson of Minnesota, practically prohibiting physicians, dentists and veterinarians from dispensing or distributing narcotic drugs to patients by substituting the word administration for the words dispensing and distributing in said bill, and

WHEREAS, Such amendment would prevent physicians from sending by messenger or otherwise remedies for immediate relief when unable to personally attend a patient on the instant, and

WHEREAS, Such restrictions on the efficiency of physicians tends to limit their usefulness to the people.

WHEREAS, The amendment in question is evidently offered purely in the interests of the dispensing druggists to the detriment of good medical service to the people.

WHEREAS, The record keeping feature, also suggested by Senator Nelson, is unnecessary, and therefore a needless burden to the physician, Therefore Be It

Resolved by the Twelfth District Medical Society that the Nelson amendment should be defeated in the interest of public welfare.

Resolved, That a copy of these resolutions be sent to the legislative committee of the Indiana State Medical Society.

E. E. MORGAN, Counselor,

LYMAN T. RAWLES, Secretary.

Dr. Will Shimer, Indianapolis, presented a paper on "Epidemiology of Typhoid in Indiana," a short abstract of which is as follows: All factors that may possibly enter in the etiology of typhoid must be considered when there is an epidemic, not only the milk, water, direct contact and food supply should be considered, but the length and character of the summer months must be taken into consideration as well.

Indiana is divided into three sanitary districts, northern, central and southern; the first two sections are situated on the Wisconsin and Illinois glacial drift, the southern district is beyond this formation and the water-supply is more easily contaminated from below.

Several charts were shown that gave an excellent idea of the difference in the death rate between the urban and rural districts, showing the death rate much higher in the urban district, and attributing the dissemination largely to the lack of personal hygiene.

In Chart 10 Dr. Shimer showed the difference in the death rate in Germany compared with Indiana; Germany has a population of over 40,000,000 and Indiana has a population of less than 3,000,000, yet the absolute number of deaths in Germany is very little less than those in Indiana. He attributes this partly to the length of the seasons, sterilization of the food and water-supply, and enforced personal hygiene. In the past seven years the death rate has been reduced in Germany 63 per cent, while in Indiana it has been reduced only 23 per cent.

This is practically due to the fact that the Germans hunt up and isolate their typhoid carriers, and isolate all cases of typhoid regardless of severity.

DISCUSSION

DR. J. S. BOYERS, Decatur: From the tabulations shown we are not yet efficient to combat epidemics of typhoid; it was at one time supposed that the driven well was a barrier to the invasion of the typhoid germ into the water-supply, but this is now known to be a falsity, because seep water will borough along the pipe and eventually get in and contaminate the supply. Boiling the water is the only way to eliminate the danger from this source.

All carriers should be isolated and treated until they show that they are free from infection, and safe

to mingle with the public. Nurses are many times too careless in the care of themselves, and eventually become infected or infect those they come in contact with.

In closing would like to have Dr. Shimer explain what effect the administration of typhoid bacterins has on pregnant women.

DR. E. E. MORGAN, Fort Wayne: People that are filthy do not withstand an attack of typhoid as well as those who live in a reasonably clean atmosphere, therefore, the condition in which people live has more to do with the mortality than does the seasons. The sanitary condition of the northern part of Indiana is not to be compared with the condition of the southern part of the state.

DR. G. W. McCASKEY, Fort Wayne: If the public were instructed in regard to typhoid and a cooperation of the public and physicians established, the disease could be exterminated, because the biology of the typhoid bacillus is thoroughly understood. Isolate the carrier, treat him and make him a fit individual to live with safely, vaccinate all exposed persons, enforce a perfect quarantine, and above all look for the source of infection and treat it.

DR. C. H. ENGLISH, Fort Wayne: All carriers should be taken care of, because these people are dangerous to the public, if necessary put them in asylums and treat them.

DR. B. W. RHAMY, Fort Wayne: We should always take it in consideration when comparing statistics with the Germans in regard to infectious diseases, that the American people are not as easily controlled under the same conditions as are the Germans; in other words, police control in Germany exists and is enforced to the letter. We can do a whole lot by cleaning up and vaccinating.

DR. COSTELLO, Decatur: Just passed through an epidemic in Decatur. Typhoid vaccine will prevent the disease and all people should be forced to be vaccinated in the presence of an epidemic.

DR. SHIMER (closing): Permanent carriers remain infected for forty years. Temporary carriers remain infected for about six months. In epidemics vaccinate, but would not advise the vaccination of pregnant women unless absolutely necessary.

Dr. Budd Van Sweringen, Fort Wayne, presented a paper on "Tabetic Crises and Appendicitis."

The subject of differential diagnosis was discussed with the history of a case, pointing out the facts that should be taken into consideration in making the differential diagnosis between the two different conditions which are so vastly different yet have so many symptoms and signs in common.

DISCUSSION

DR. H. A. DUEMLING, Fort Wayne: Many people have lost their appendices due to mistakes in diagnosis. Pain is not a constant thing in appendicitis and may be in any part of the abdomen. It may be found in the perineum.

The etiology of tabes is often very indefinite, and, sometimes cannot be elicited at all. Wassermann test of the blood and spinal fluid will often clear up these points in the diagnosis.

In cases of abdominal pain of which the cause is obscure one should think of spondylitis, as many of these cases call for the keenest judgment.

DR. M. F. PORTER, Fort Wayne: Careful examination of all cases will help to avoid many mistakes. Furthermore, careful histories are very important. Temperature and blood count is a point that must be taken into consideration also when making a differential diagnosis.

Dr. Van Sweringen in closing agreed that the points taken by the discussants were well taken.

DR. R. M. BOLMAN, Fort Wayne, presented a paper on "Renal Calculi."

The subject of differential diagnosis of renal calculi, tuberculosis of the kidney, intermittent hydronephrosis, pyelitis and pyelonephritis were discussed, as were also the pathology that might exist in adjacent organs such as cholelithiasis, pancreatitis, appendicitis and angioneurotic edema.

The report of a case was woven into the paper in order to better emphasize the points in pathology. Roentgen ray is a valuable aid in the diagnosis when the composition of the stone is such that it will cast a shadow. The absence of a shadow in a suspicious case does not prove absolutely that a stone does not exist.

DISCUSSION

DR. G. W. McCASKEY, Fort Wayne: Renal calculi is far more common than is recognized. The Roentgen ray is an excellent help where the stone casts a shadow. All stones do not cast shadows, as the essayist has pointed out, on account of the chemical composition of the calculi.

DR. FULTON, Bluffton: Saw an operation in Guy's Hospital, London, where the operator had removed a tuberculous kidney one year before; at this time he removed a large stone from the remaining kidney.

DR. H. A. DUEMLING, Fort Wayne: We should differentiate very closely before diagnosing a stone in the kidney, from the following:

1. Inflammatory tissue sometimes shows on a plate and looks like a stone.
2. Tuberculosis of the kidney.
3. Tabetic crisis and tabetic pains, also appendicitis.
4. Roentgen ray is not absolutely diagnostic of renal calculi for reasons already stated.
5. Kidney function must be tested out before operations.

The route of choice that I choose is the transperitoneal.

The size of the stone is not significant of the pathology which depends on the amount of infection, and the kind of bacteria that make up the flora.

DR. B. P. WEAVER, Fort Wayne: Roentgen-ray diagnosis is conceded to be the best method of diagnosis if the pictures are well taken. No set of pictures are complete unless they include the last two ribs, pelvis and bladder.

The evening session was called to order by President McKinney at 8:30 in the assembly room of the Court House.

Dr. Balch of Kalamazoo, Mich., was the guest of the evening and read a paper on the "Surgical Treatment of Tuberculous Glands of the Neck." The paper was discussed by Drs. Porter, Duemling, McOscar, Weaver and Morgan. Dr. Balch closed the discussion.

A rising vote of thanks was extended to Dr. Balch for coming to our city and reading us his excellent paper.

Adjourned. LYMAN T. RAWLES, M.D., Secretary.

FORT WAYNE MEDICAL SOCIETY

Meeting of November 11

The society met in regular session in the assembly room, with twelve members present. Minutes of the previous meeting read and approved as read. No clinical cases.

Dr. E. Don Smith read a paper on "The Sources of the Tuberculous Infection."

DISCUSSION

Dr. Dancer: We have not paid any attention to tuberculosis in children in our schools because of some opposition by medical men.

Dr. Wallace: With reference to disinfection of a house in which tuberculosis has been present, I think that the board of health should disinfect that house free of charge.

Dr. Bruggeman mentioned the formalin method of disinfection. Soap and water used in washing wood-work following this disinfection is about as efficacious as the former one. Sputum is not the greatest source of tuberculous infection. It would seem to me that constant contact with a tuberculous individual would be a source of greater danger.

Dr. Dancer: Some one took a culture from transmitters of all telephones in a sanitarium for tuberculous patients and the culture did not yield tubercle bacilli.

Dr. Weaver: We all know that in years past a large percentage of children have fed on tuberculous milk. What we need to do is to avoid this disease by prevention. We should assist the board of health more than we do, also the school inspectors.

Dr. Rawles: We cannot do much to stop this thing unless we have the cooperation of the public press.

Dr. Bruggeman: How do you know when tuberculosis is cured?

Dr. Blosser: Ninety per cent. of post-mortem examinations reveal tuberculosis in some form. I think this fact should be impressed on the public.

Committee to investigate the work of the Fort Wayne Antituberculosis Society presented the following resolution:

It is the sense of this committee that the Fort Wayne Medical Society acquaint the public with the fact that as a body it is in hearty accord with the movement of the Fort Wayne Antituberculosis Society and recommends that this society give its full support.

(Signed) B. R. WEAVER, Chairman.

C. R. DANCER.

C. G. BEALL.

Adjourned.

G. VAN SWERINGEN, Secretary.

Meeting of November 18

Society met in regular session in the assembly room with twenty members present. Meeting called to order by the president. Minutes of previous meeting read and approved.

Clinical case night, in charge of Drs. E. J. McOscar and C. E. Barnett.

Dr. McOscar: Case 1.—Male, aged 15 years, has had attacks of pain extending from loin to groin. These attacks have existed periodically for two years. A diagnosis of appendicitis was made. Was given osteopathic treatment. Finally fell into my hands. X-ray plate shows stone in left kidney.

Case 2.—Male, 18 years of age, has had bladder and kidney trouble for three years; labor of any kind produces pain and distress; could not lie on back

because of pain; a suprapubic cystotomy revealed cystic calculus; one large stone was removed. This is the largest stone I have ever seen removed from urinary bladder.

Case 3.—Patient 83 years of age; family history negative; bladder trouble; blood-pressure 130; $3\frac{1}{2}$ per cent. albumin; prostatic trouble of long duration; large calculus found in prostate; a hemorrhage following removal was very profuse, controlled by gauze packing.

DISCUSSION

Dr. C. E. Barnett: Most stone cases get well, prostatic cases with stone get well too; urine in these cases is always alkaline; a hemorrhage is best controlled by packing; pyelotomy is more frequently done than nephrectomy; do not drain within kidney, but from fossa.

Dr. Barnett: Case 1.—General tuberculosis, involving prostate epididymis, vas deferens; patient exhibited and showed marked improvement in general physical condition, is under treatment with tuberculin and autogenous vaccine with local bladder medication.

Cases 3 and 4.—Reports of two cases of active epididymitis. Treated by Haggard method; prompt recovery.

Dr. J. C. Wallace reported a case of macerated fetus following missed abortion due to syphilis; exhibited specimen.

Application of Dr. Harry Erwin, Hometown, Ind., acted on favorably by the board of censors. Motion carried that secretary cast unanimous vote of society for Dr. H. G. Erwin for membership.

Adjourned.

G. VAN SWERINGEN, Secretary.

DELAWARE COUNTY

Regular meeting of Delaware County Medical Society was held in Muncie Public Library, May 1, with President D. M. Green, M.D., presiding. The society had for its guest and entertainer Dr. William Shimer of the State Laboratory of Hygiene, who spoke on the subject "Rabies." Dr. Shimer said in part: For many years the diagnosis of rabies was made on suspicion only; and undoubtedly many cases, so called, were pseudo cases. Not a few able physicians were skeptical and claimed that they never saw a real case of rabies. In 1903 diagnosis was placed on a scientific basis, for in that year Dr. Negri discovered the bodies always present in all cases of rabies. Now instead of a gross examination of a dog's stomach for the purpose of finding stones, splinters of wood, nails, brickbats or other indigestible substances to clinch a diagnosis, a section of the brain is placed under a laboratory microscope. Diseases of the brain may be divided into three classes: (1) Those affecting membranes (meningitis), (2) those involving motor cells of anterior column (anterior poliomyelitis) and (3) that destroying brain substance, (rabies). The infection is conveyed through saliva of the rabid animal, travels by nerve rather than by blood route, perhaps assisted by lymphatics, to spinal cord and finally to brain. Incubation period is about sixty days, with possible extremes of thirty to one hundred and twenty days. It is possible that the Negri body undergoes a cycle of development during its transit from point of entrance to brain. It has been demonstrated that a dog cannot transmit the disease except for a short time before his own death. If a dog lives ten days or two weeks after he has bitten a patient, there is no danger from the bite. Incubation is modified by age of subject, place of bite, amount of matter introduced, thickness of clothing or hair and nature of wound. A laceration which bleeds freely is not so dangerous as

a deep puncture. Forty per cent. of dogs bitten develop the disease. The general mortality of human beings is 15 per cent. Those bitten on the face show a mortality of 35 per cent. Treatment should begin immediately in children, for the incubation period is shorter and the mortality greater than in adults.

Rabies may be divided into two classes, active and passive. The former is represented by the maniacal type and the latter by the paralytic. Former may be followed by latter in the same victim. The symptoms may vary considerably in the human subject. A typical case is very plain but an atypical may cause much confusion. There are many more cases of rabies than suspected, and many careful physicians and veterinarians have been fooled on atypical cases.

Under the modern treatment mortality has been reduced to 0.5 per cent. In childhood and face injuries 3 per cent. die. In five hundred cases treated at Indianapolis there have been two deaths. The serum for treatment is made from the dried cord of infected animal. Paralysis may result from the cord being insufficiently dried or dose being too concentrated. The disease instead of getting active becomes passive. Chemical laboratories are now furnishing the treatment to local physicians. A marked reaction usually follows the first injections but the effects disappear in about thirty-six hours. Hysterical women may exhibit profound urticaria. Alcoholic drinks and all excitement should be excluded. From twenty-one to twenty-five treatments are necessary.

The number of cases varies little with the change of seasons. Contrary to popular belief, there is no such thing as "dog days." The State Laboratory will treat all indigent patients free of cost, but does not manufacture treatment for distribution to local physicians.

Adjourned.

H. D. FAIR, M.D., Secretary.

ELKHART COUNTY MEDICAL ASSOCIATION

Regular May session called to order in Doctor Stauff's office, Elkhart, at 8:15 p. m., by the secretary. Dr. I. W. Short was elected chairman, pro tem. Minutes of April meeting read and approved. Dr. E. J. Hagenbaugh was unanimously elected to membership. Chairman appointed Drs. Haywood, Kirby and J. A. Work, Jr., a committee to arrange for June picnic.

Dr. S. C. Wagner, Wakarusa, "Some Observations in Obstetrics." The successful obstetrician is especially adapted by his temperament and superior training to practice the art. The female pelvis is his special field of study. Especially must he know what degree of adaptability for parturition the individual case presents. In the first stage of labor look for evidence of maternal or fetal dystocia. "Reasonably frequent" vaginal examinations are necessary during the second stage. Reasons: (1) Possible prolapse of soft parts of fetus at cord; (2) to guard against neglect of face presentation; (3) to determine exact position of the head. Scrupulously careful to observe aseptic precautions. Left lateral posture best where applicable. Chloroform or other anesthesia lessen shock and are humanitarian agents. Anesthesia assists materially in careful examinations. Chloral, morphin, or H. M. C. are indicated in selected cases. At completion of second stage examine child for deformity, especially talipes. Talipes may be entirely corrected or greatly benefited by forcible manipulation at this time. Physician himself should continue gentle pres-

sure of the fundus uteri during the third stage. Credé methods of vastly greater value in causing uterine contraction than administration of ergot. Repair any perineal lacerations. Wash and dry external genitals, lower abdomen, thighs and buttocks. Apply T-binder and perineal pad. Give patient light nourishment, banish all visitors, darken and ventilate room and leave patient "undisturbed by washing, dressing and crying of the child."

Dr. Wagner emphasized the value of pituitrin in inertia uteri and of mixed infection phylacogen in puerperal infection. He has used the former in thirty-six cases with no ill results. The latter is given in doses of 1 or 2 c.c. repeated every twelve or twenty-four hours as conditions may indicate.

Following is summary of 700 cases:

Parous—

| | |
|-----------------|--------------|
| Multiple | 70 per cent. |
| Primipara | 30 per cent. |

Position of Fetus—

| | |
|----------------------------|-------------------------|
| O. L. A. | 75 per cent. |
| O. R. A. | 6 per cent. |
| O. R. P. | 1 per cent. |
| O. L. P. | $\frac{2}{3}$ per cent. |
| Breech | 2½ per cent.* |
| Face | 0.5 per cent. |
| Precipitate Delivery | 17 per cent. |

Abnormalities of Fetus—

| |
|---------------------------|
| 1 monstrosity, 16 pounds. |
| 7 twins. |
| 1 hydrocephalus. |
| 12 still-born because of: |
| 3 placenta praevia. |
| 2 deformed pelvis. |
| 7 atelectasis. |

Version-podalic.—10 cases.

Placenta praevia.—4 cases; 75 per cent. fetal mortality.

Eclampsia.—4 cases. No mortality.

Adherent placenta.—12. None since use of pituitrin.

Laceration of perineum.—24. Primary repair.

Phlegmasia albo dolens.—1.

DISCUSSION

DR. A. A. NORRIS, Elkhart: Would not place such emphasis on anesthesia during labor. Has obtained good results from morphin given during second stage. Does not habitually massage the fundus during first twenty minutes after delivery.

DR. G. W. KIRBY, Goshen: Pituitrin a valuable aid. Has not had a case of post-partum hemorrhage. Case of adherent placenta ten days ago. Credé method did not deliver placenta. Anesthetized patient, introduced hand into uterus and found area of calcification.

DR. J. A. WORK, SR., Elkhart: Believes in careful and explicit instruction to woman during her pregnancy. Prepare her for the ordeal. Calm her fears.

DR. W. A. STAUFFER, Elkhart: Cited recent case of woman eight months pregnant showing a large percentage of albuminuria. Prescribed limited diet and epsom salts. Delivered her a few days later. Placenta all through it showed dark clotted blood. Inquired to know what particular relation this condition holds to albuminuria.

DR. C. W. FRINK, Elkhart: Uses quinin (8 to 12 grains in divided doses) to induce effective labor.

* 8 per cent fetal mortality.

Strong advocate of left lateral position. Emmerated its advantages. Believes in routine examination of patient during pregnancy.

DR. B. F. KUHN, Elkhart: Massage of fundus uteri more important than administration of ergot.

DR. J. A. WORK, JR., Elkhart: Reviewed Prof. Krönig's report on use of scopolamine and morphin in 3,000 cases in Freiburg maternity clinic.

DR. S. C. WAGNER, Wakarusa, (closing): Differentiate between obstetrical and surgical anesthesia. Patient will become stronger under primary ether anesthesia. Uses pituitrin in preference to quinin. Former is more valuable on account of its specific action in controlling post partum hemorrhage. Minimal exposure of patient in lateral position.

The following assertions were made by Dr. G. W. Kirby, Goshen, in a prepared paper:

The new doctor in a town is subjected to heroic initiatory treatment at the hands of his older "brothers" in the profession. Implied and flagrant thrusts at colleagues, inability or refusal to agree in diagnosis, and ignorance among physicians and surgeons who will not learn are reasons for the thriving osteopaths, chiropractors, Christian Science healers and exponents of other cults. The physician must be better paid. There must be a better system for collection of slow accounts. Office hours must be shortened and more uniform with all the physicians in a community. More time must be used in social relations between physicians and between families of physicians.

Adjourned.

JAMES A. WORK, JR., M.D., Secretary.

LAKE COUNTY

The regular meeting of the Lake County Medical Society was held at the Gary Commercial Club, May 14, at 7 p. m., Dr. J. W. Iddings presiding. There were twenty members and one visitor present.

Minutes of April meeting read and approved.

A communication was received from the American Red Cross Association relative to medical and surgical volunteers in case of war. A report was given by Dr. Shanklin in the matter of public addresses in connection with conservation of vision movement.

The question of the attitude of legislative candidates in relation to medical affairs was discussed and a committee on public health and legislation appointed, with instructions to get the various candidates on record.

Dr. Shanklin presented a paper, "What About Trachoma?" He discussed the apparent spread of the disease through certain parts of the country, particularly among the foreign born population of Lake County. Under certain conditions, trachoma is a menace, and we should use every effort to control the infection. The economical and sociological phases are worthy our serious consideration.

DISCUSSION

DR. BOARDMAN: In Gary we see many cases of trachoma, and I believe the disease is increasing. Have frequently noticed that ulcers from trachoma are less likely to leave a scar than ulcers from other causes. Canthoplasty should be done in nearly all cases.

DR. NESBIT: This disease is reportable in Indiana. In one county in southern Indiana thirty to forty

cases were found as the result of a survey made some time ago. Lake County might profit by such a survey.

DR. YARRINGTON: I saw four or five cases in the Gary schools last year, though trachoma is less common in children.

DR. J. W. IDDINGS: A man with trachoma came to Lake County in 1836; had fourteen children, all of whom contracted trachoma. Here we find forty cases traceable to a common source. In three cases there was complete blindness; in four cases, blindness in one eye; in ten cases serious disturbance of vision.

Adjourned. E. M. SHANKLIN, M.D. Secretary.

MARSHALL COUNTY MEDICAL SOCIETY

The Marshall County Medical Society met at Bremen, May 28, at 1:30 p. m. Meeting called to order by President Eley, with nine members present.

Minutes of previous meeting read and approved.

County members' attendance at the last Seventh District meeting was read.

Application of Dr. Kelley of Argos referred to board of censors.

The next meeting place was changed from Bonrbon to Culver, with plans to extend an invitation to the Starke County Medical Society to attend that meeting. Dr. Preston and the secretary, Dr. J. J. Hardy, were appointed to arrange the program for that meeting.

Dr. H. P. Preston read a paper on "Tumors of the Female Breast," which was followed by an active discussion.

Dr. C. E. Nnsbaum presented a paper on "Some Considerations of Pain," which was also thoroughly discussed.

Lunch and cigars served by the Bremen doctors.

Adjourned. JOHN J. HARDY, Secretary.

SPENCER COUNTY

The Spencer County Medical Society held its regular session May 19, at Chrisney, the guests of Dr. A. M. Bean, Dr. S. P. Gwaltney presiding.

Minutes of previous meeting read and approved.

Dr. C. S. Baker presented a paper on arteriosclerosis in a very skillful and scientific manner.

County Health Commissioner Dr. G. B. DeTar being present, gave some helpful suggestions along lines of sanitation, and requested that all physicians be very prompt in making reports to him for record.

Meeting adjourned to meet at Lincoln City, June 16, 1914.

H. Q. WHITE, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1914, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

SODIUM BIPHOSPHATE, SQUIBB.—This non-proprietary form of sodium acid phosphate has been accepted for inclusion with New and Nonofficial Remedies. E. R. Squibb & Sons, New York (*Jour. A. M. A.*, May 2, 1914, p. 1401).

NORMAL HORSE SERUM WITH CHLOROFORM AS A PRESERVATIVE.—Marketed in vials, each containing 50 c.c. H. M. Alexander & Co., Marietta, Pa.

NORMAL HORSE SERUM WITHOUT PRESERVATIVE.—Marketed in vials, each containing 50 c.c. H. M. Alexander & Co., Marietta, Pa. (*Jour. A. M. A.*, May 2, 1914, p. 1401).

EREPTON.—A meat product consisting largely of the amino-acids produced by the digestion of meat. Erepton is said to be useful in cases in which it is necessary to substitute a perfectly digested food for the product of natural digestion in cases of gastric or intestinal indigestion and for the purposes of rectal alimentation. Farbwerke Hoechst Co., New York (*Jour. A. M. A.*, May 16, 1914, p. 1559).

ACNE SEROBACTERIN, MULFORD.—This is a sensitized acne vaccine. H. K. Mulford Co., Philadelphia, Pa.

COLI SEROBACTERIN, MULFORD.—This is a sensitized coli vaccine. H. K. Mulford Co., Philadelphia, Pa.

NEISSER SEROBACTERIN, MULFORD.—This is a sensitized gonococcal vaccine. H. K. Mulford Co., Philadelphia, Pa.

PNEUMO SEROBACTERIN, MULFORD.—This is a sensitized pneumococcal vaccine. H. K. Mulford Co., Philadelphia, Pa.

STAPHYLO ACNE SEROBACTERIN, MULFORD.—This is a sensitized staphylo acne vaccine. H. K. Mulford Co., Philadelphia, Pa. (*Jour. A. M. A.*, May 16, 1914, p. 1559).

NEW BORNYVAL.—New bornyval is borneol isovaleryl glycolate, the isovaleryl glycolic acid ester of borneol. Being more resistant to the gastric fluids than bornyval, it passes the stomach unchanged and is said therefore to be less irritating than bornyval. Its properties are similar to those of bornyval and other valerian preparations. New bornyval is an almost tasteless and odorless liquid, insoluble in water. It is sold also in the form of Bornyval Pearls, each containing 4 minims of New Bornyval. Riedel & Co., New York (*Jour. A. M. A.*, May 23, 1914, p. 1637).

PROPAGANDA FOR REFORM

VALENTINE'S MEAT JUICE.—Four years ago an examination by the Council on Pharmacy and Chemistry showed that Valentine's Meat Juice was not a meat juice, but had the character of a meat extract instead, while on the basis of the claim that it was a meat juice extravagant assertions as to its nutritive value were made. The product being a meat extract was practically devoid of nutrient qualities. As Valentine's Meat Juice is still widely advertised the Council deemed a reexamination important. This reexamination shows that in general it has the composition now as then, and that the same unwarranted claims are still made for it (*Jour. A. M. A.*, May 2, 1914, p. 1419).

LOWER'S GERMEN PRESCRIPTION.—This "consumption cure," hailing from Marion, Ohio, is sold under the claims: "The most Deadly Foe to the Great White Plague—TUBERCULOSIS—Science Has Yet Produced." "it takes from fifteen to thirty large bottles of Germen Prescription to remove the tuberculosis poison," each bottle costing the victim two dollars. The composition of the nostrum is purported to be (in bastard Latin): "Herb Menthaepeperitae, Herb Marrubium Vulgarae, Ex balsamum Tolutonum, Herb Hydrastis Canadensis, Scillae Maratonia, Mentholis, Ex Virginiana Prunus, Ex Capsici Fastigiatum." An examination made in the A. M. A. Chemical Laboratory indicates that whatever therapeutic virtues this peppermint-horhound-cayenne pepper-menthol mixture possesses are due to the 1.83 gm. menthol

per 100 c.c. which it contained. About the only effect produced by the mixture will be to derange the digestion of the person taking it (*Jour. A. M. A.*, May 2, 1914, p. 1418).

PITUITARY EXTRACT.—The use of pituitary extract as an oxytocic must be considered in the experimental stage. A large number of cases have been reported in which untoward effects from the use of various pituitary extracts (including pituitrin) were obtained (*Jour. A. M. A.*, May 2, 1914, p. 1420).

PANCREATIN.—Long and Buhleman report that mere traces of hydrochloric acid will destroy the ptyalin of pancreatin, that pancreatin of commerce—which often is not pancreatin but merely the dried pancreas gland—is practically devoid of lipase, the fat digesting ferment, and that its tryptic ferment is likely to be destroyed by the action of the pepsin and hydrochloric acid during its passage through the stomach (*Arch. Int. Med.*, Feb. 1914, p. 314).

THE OKOLA LABORATORY.—The postmaster general has issued a fraud order against the Okola Laboratory, Inc., Rochester, N. Y., which sold a mail-order treatment for weak eyes. The "laboratory" advertised that Dr. John L. Corish, "an able New York physician" and "an eminent medical man," had discovered a marvelous treatment for affections of the eye by which those who were wearing glasses or who should have been wearing glasses would do without them. The treatment consisted of three parts. Okola was the name of some tablets proven by the government to consist of baking soda and boric acid. The Okolator was a metal inhaler containing cotton moistened with a volatile liquid. The Okolizers were printed cards giving instructions for rubbing the eyes, etc. (*Jour. A. M. A.*, May 9, 1914, p. 1492).

PA-PAY-ANS (BELL) NOW BELL-ANS.—Bell & Company announce that Pa-pay-ans (Bell) is in the future to be known as Bell-ans. An examination of Pa-pay-ans (Bell) made by the Council on Pharmacy and Chemistry having failed to demonstrate the presence of papain, it is probable that the change of name was decided on to escape prosecution for misbranding (*Jour. A. M. A.*, May 9, 1914, p. 1492).

BROMIDIA (BATTLE AND CO.).—A report of the Council on Pharmacy and Chemistry points out that while the name suggests bromid, Bromidia is essentially a chloral preparation. This nostrum illustrates the need of the Council's rule under which recognition is refused to pharmaceutical mixtures whose name does not indicate their most potent ingredients. While the chloral content of Bromidia has been given considerable publicity, yet the preparation is used both by physicians and by the public, without due consideration of its ingredient, as attested by the fatal results and the habit-formation which have resulted from its use. The Bromidia advertising propaganda first admits the presence of chloral, then it is argued that in Bromidia the evil effects of chloral are eliminated and in the end the impression is left that Bromidia is practically innocuous and may be given even in cases of typhoid and to children (*Jour. A. M. A.*, May 16, 1914, p. 1573).

MONTE CRISTO RUM AND QUININ FOR THE HAIR.—The government chemists found this preparation to contain ethyl alcohol, wood alcohol and a trace of quinin. The manufacturers were found guilty of adulteration and misbranding the preparation (*Jour. A. M. A.*, May 16, 1914, p. 1575).

PEPSIN MAGEN BITTERS.—The government chemists found this preparation to contain only a trace of pepsin. The preparation was declared misbranded (*Jour. A. M. A.*, May 16, 1914, p. 1575).

BAVARIAN MALT EXTRACT.—The government chemists proved that this was not a malt extract coming from Bavaria, but instead was beer. The product

was declared misbranded (*Jour. A. M. A.*, May 16, 1914, p. 1575).

THIOCOL READMITTED TO N. N. R.—In 1913 the Council on Pharmacy and Chemistry directed the deletion from New and Nonofficial Remedies of Thiocol and Syrup Thiocol, Roche, because a preparation called Sirolin, containing Thiocol as its effective component and practically the same as Syrup Thiocol, Roche, was being advertised to the public. The Hoffmann-LaRoche Chemical Works having furnished assurance that the public exploitation of Sirolin has been discontinued, the Council voted that Thiocol and Syrup Thiocol, Roche, be restored to New and Nonofficial Remedies (*Jour. A. M. A.*, May 23, 1914, p. 1637).

ANTIMENINGITIS SERUM.—The untoward or fatal effects sometimes following the use of antimeningitis serum are probably due to the toxic action of the preservative contained in it or to increased intracranial tension due to its administration. The technic of its employment should be improved rather than its use abandoned. The dangers which may arise from its use are not to be feared as much as the disease itself (*Jour. A. M. A.*, May 23, 1914, p. 1661).

LIQUID PETROLATUM OR "RUSSIAN MINERAL OIL."—A report of the Council on Pharmacy and Chemistry points out that petroleum oil was used as a medicine by the ancients and that the product "liquid petrolatum" is now on the market under a host of proprietary names and is official in most pharmacopeias. It was at one time used in the treatment of tuberculosis and as an adulterant of fats and oils on the assumption that it was assimilable. It is now known to pass the system unchanged and has recently been highly landed as a particularly harmless laxative in the treatment of habitual constipation. As the U. S. P. definition of liquid petrolatum permits the use of rather widely varying products and as there is some difference of opinion whether a light or a heavy oil is preferable, the Council recommends that physicians desiring the water white, non-fluorescent (Russian) mineral oil use the term *petrolatum liquidum* grave or *paraffinum liquidum*, B. P. if the heavy product preferred by Sir F. Arbuthnot Lane is desired and *petrolatum liquidum laeve* if the light variety is desired (*Jour. A. M. A.*, May 30, 1914, p. 1740).

CIRKULON.—The device "Pulsocon" which Gerald Macaura has exploited widely in England, is sold in this country as "Cirkulon" by the "Cirkulon Institute" of Kansas City, Mo. Gerald Macaura, according to the Associated Press, has been sentenced in France to serve a term of three years' imprisonment on a charge of fraud (*Jour. A. M. A.*, May 30, 1914, p. 1742).

BOOK REVIEWS

THE PRINCIPLES AND PRACTICE OF GYNECOLOGY. FOR STUDENTS AND PRACTITIONERS. By E. C. Dudley, A.M., M.D., Professor of Gynecology in the Northwestern University Medical School, Chicago. Sixth edition, thoroughly revised. Octavo, 795 pages, with 439 illustrations, of which many are in colors, and 24 full-page plates. Cloth, \$5.00 net. Lea & Febiger, Publishers, Philadelphia and New York, 1913.

The general standard of excellence maintained in the previous five editions of this work is in itself a sufficient guarantee of a high standard in the sixth revision. This work has always been a favorite text-book for use in conjunction with gynecologic courses in medical schools, chiefly because of its logical arrangement along pathologic and etiologic rather than on anatomic lines. By taking up the subject, for instance, of acute

inflammations and pursuing them through their lesions in each of the various parts of the female reproductive system, for example vaginitis, endometritis, salpingitis, etc., the student is given a more comprehensive idea of this type of disease in gynecology. No single characteristic of this book stands out so prominently as that of the illustrations. No medical text-book printed in English has ever surpassed the excellence of its engravings and plates. The sixth revision should take its place along side of its predecessors as one of the leading English authorities on the subject of gynecology.

GENITO-URINARY DIAGNOSIS AND THERAPY FOR UROLOGISTS AND GENERAL PRACTITIONERS. By Dr. Ernst Portner, Specialist for Urology, Berlin, Germany. Translated and edited by Bransford Lewis, M.D., B.Sc., Professor of Genito-Urinary Surgery, Medical Department of St. Louis University, St. Louis; Genito-Urinary Surgeon to St. John's Hospital and Frisco Hospital. Price, \$2.50. Forty-three illustrations, pages 221. C. V. Mosby Company, St. Louis, 1913.

This book was written expressly for the general practitioner as a therapeutic guide in genito-urinary diseases. No attempt has been made to describe any of the more technical operative procedures nor even to exhaust the more simple therapeutic measures, but to assist in the intelligent management of those more simple cases "that can without the application of much time and the requirement of extensive apparatus, be treated in general practice."

The text is extraordinarily concise, almost telegraphic in style, and remarkably complete for a work of its size.

Some of the more unusual features of the work are the special chapters on urinary diseases in women and in children and an excellent appendix by A. Sophian on the serologic diagnosis and specific treatment of gonococcal infections, which includes the most advanced experimental and clinical studies on these subjects.

The interpolations by the editor and translator are quite as terse as the general text and in many instances even more helpful.

DISEASE AND ITS CAUSES. By W. T. Councilman, A.M., M.D., LL.D., Professor of Pathology, Harvard University. 254 pages. Fifty cents. New York. Henry Holt & Company; London, Williams and Norgate.

There is an unfortunate gap between the monosyllabic and notoriously inaccurate so-called scientific books for children and the highly technical and complete treatises for those who have specialized in various branches of advanced science.

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If the rest of the series fulfill their purpose as well as this little book, it is a work excellently done. The author, Dr. Councilman, was a peculiarly happy selection for he is not only a noted authority on pathology, but a singularly gifted teacher.

The book is written in an extremely lucid and attractive style and has frequent touches of the quiet humor so familiar to those who have studied under this much beloved man.

To anyone wishing to gain a general understanding of the causes and processes of disease without having

his intelligence insulted on the one hand, or being forced into frequent consultation of the encyclopedia on the other, this book is highly recommended.

DIET IN HEALTH AND DISEASE. By Julius Friedenwald, M.D., Professor of Gastro-Enterology in the College of Physicians and Surgeons, Baltimore; and John Ruhräh, M.D., Professor of Diseases of Children in the College of Physicians and Surgeons, Baltimore. Fourth edition, thoroughly revised and enlarged. Octavo of 857 pages. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$4.00; Half Morocco, \$5.50 net.

The fourth edition of this standard work on dietetics has been made necessary by the recent advances in the study of metabolism, in which such great strides have been made latterly, and also in recognition of the fact that diet and hygiene have come to be regarded as two of the most essential features in the treatment of disease. In the past we have been content to know the relative percentages of fat, carbohydrates and protein in various food stuffs, whereas to-day we want to know not only the caloric value of every food and the various principles entering into it, but we are also interested in many of the mineral elements, such as phosphorus, calcium, magnesium, iron, potassium, sodium and sulphur. As yet metabolic studies have not reached the period where exact determination of these substances can be made in every case, yet the clinical importance of their presence in certain foods is recognized.

The time is at hand when the clinician desires to be just as familiar with dietary prescriptions as with medicinal ones and we know of no work which more completely fulfills the needs of a general practitioner for such purposes than this excellent one of Friedenwald and Ruhräh's. Typhoid fever offers a very striking example of the revolution that has taken place in dietetic treatment in a comparatively short time, and in this work the subject is very well discussed. A very welcome addition to this edition, also, is the quite complete section on infant-feeding, on which few others are better qualified to write than Dr. Ruhräh. Indeed, all the way through one finds real pleasure in the discovery of the many practical applications which can be encountered in referring to this excellent work.

CASE HISTORIES IN PEDIATRICS. By John Lovett Morse, A.M., M.D., Associate Professor of Pediatrics, Harvard Medical School; Associate Visiting Physician at the Infants' Hospital and at the Children's Hospital, Boston. Second edition. Octavo, pp. 640. Cloth, \$5.50. W. M. Leonard, Publisher, Boston, 1913.

With the total number of case histories doubled in this edition, over those presented in the first, and with the addition of a most excellent preliminary section on the normal development and physical examination of infants and children, this work should prove even more popular than its first edition. Indeed it would be a valuable reference book for this first section alone, due to the fact that so much must be objective examination in infants as compared to older children and adults.

The index has of necessity been made fuller and more complete, and its free use will add materially to the function of the book as a reference work.

Case-history teaching has come to stay and its scope is by no means limited to the undergraduate. In pediatrics, none is better qualified than Dr. Morse to present in forceful fashion a selected group of cases which will best illuminate this subject.

THE PRACTICAL MEDICINE SERIES. Under the general editorial charge of Charles L. Mix, A.M., M.D. Volume 9: Skin and Venereal Diseases; Miscellaneous topics edited by W. L. Baum, M.D., and Harold N. Moyer, M.D. Volume 10: Nervous and Mental Diseases, edited by Hugh T. Patriek, M.D., and Peter Bassoe, M.D. (Practical Medicine consists of a series of ten volumes issued at about monthly intervals, reviewing the entire field of medicine and surgery.) Price per volume, \$1.35; price of series, \$10.00. The Year Book Publishers, Chicago.

The more notable reviews in Volume 9 are the Carcinoma Skin Reaction, an extensive one on the External Cause of Dermatoses, including sporotrichosis and the association of genital disease and diabetes. The literature on the subject of the previous year has been carefully summed up and the important practical points emphasized.

Volume 10 covers a field to which there have been many notable additions. There is a free discussion of the Freudian doctrine as it applies to the neuroses and some of the psychoses. Intraspinal injections of salvarsan and salvarsanized serum receives considerable space. An abstract of the proceedings of the joint meeting of the sections on surgery and neuropathology of the last International Medical Congress, gives the views of representative men on brain tumors. Considerable space is devoted to the pineal gland.

Hartel's technique for injecting the Gasserian ganglion is given. Altogether the volume is a very creditable review.

DISEASES OF THE DIGESTIVE CANAL (Esophagus, Stomach, Intestines). Dr. Paul Cohnheim. From the second German edition. Edited and translated by Dudley Fulton, M.D. Illustrated third edition. J. B. Lippincott Co., Philadelphia and London. Price, \$4.00.

Probably the one thing that most highly recommends this book is that it was necessary to make but few changes and additions in this third edition. The plan of the work consists of a general section devoted to the anamnesis, physical examination, chemical and microscopical examination of the stomach, use of the stomach tube and a few pages covering the more important practical points to be learned from skiagraphy. The special section takes up in detail the various diseases of the digestive canal.

While the author is known in America chiefly because of his work on the digestive canal, yet his practice is general, and this makes him all the more competent to give the general practitioner a book on a special subject, particularly a subject which forms such a large part of his daily work.

One of the distinguishing features is the care taken throughout the work to sharply separate the anatomical from the functional diseases of the stomach and intestines, because on this point more than on any other depends the proper therapy. Another important and very practical point is the emphasis laid on making a provisional diagnosis from the anamnesis and having this confirmed or rejected by the physical and chemical examination.

The book is not burdened with complicated methods or discussions of physiologic and pathologic questions, nor is it, as too many medical books are, a compilation from other text-books. The volume is the result of the personal experience of a man doing general work, who has special ability along the line of gastrointestinal diseases. The work cannot be too highly recommended.



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*From article on “Infant Feeding,” by John Lovett Morse, A. M., M. D., Boston, Associate Professor of Pediatrics, Harvard Medical School; Associate Visiting Physician, Children's Hospital and Infants' Hospital.—In the *New York Medical Journal*, March 8, 1913.

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VOLUME VII

FORT WAYNE, IND., JULY 15, 1914

NUMBER 7

ORIGINAL ARTICLES

THE SILENT AREAS OF THE BRAIN; A REPORT OF THREE CASES *

BAYARD HOLMES, M.D.
CHICAGO

The progress of the arts in general has given a new impulse of late to the study of the diagnosis of diseases of the brain and their surgical treatment. We are returning again to one of the earliest surgical operations of which archaeology gives any record. It is evident that the paleolithic man was accustomed to the decompression operation for diseases of the brain, or for the production of conditions thought desirable in their distinguished citizens.

My own attention was early called to the study of localization of brain diseases, and my service as intern at the County Hospital gave me ample opportunity and time to exercise such knowledge as the early diagnostic work of French and English surgeons and physiologists presented. My old note-books contain many remarkable cases with the autopsy findings, but none of them are so apt and timely as the record of the study of recent observations in private practice.

The relatively slow advance of surgery of the head, as compared with the surgery of the pelvis, abdomen and thorax, has been due largely to the difficulty of craniotomy as compared with the exploration of the pelvis, the abdomen and even of the three serous cavities of the chest. There has also been another difficulty relating entirely to diagnosis.

During the past year Emil Abderhalden of Halle has perfected his defensive ferment reaction, and during the next year or two there is every reason to believe that it will become avail-

able for localizing diseases in the cranial cavity. It will probably far outdo all that the Roentgen-ray has done in the diagnosis and localization of disease in other parts of the body.

At the same time, Dr. Emil Hogland of Chicago has perfected his engine, which not only makes trephining safe and rapid, but allows large bony flaps to be raised from any part of the skull and replaced again almost as rapidly and easily as a similar flap can be made in the scalp itself. It is difficult to imagine how much this simple mechanical contrivance will add to the early exploration of the brain and the safety of extensive temporary craniotomies. It is probable that Donet's complete removal of the calvarium over the two hemispheres of the cerebrum will become a practical surgical procedure.

There are certain portions of the brain that give such localizing symptoms when they are diseased that it is easy to say exactly where the focus of destruction is to be found. There are other parts of the brain that give no such localizing symptoms. These latter areas are frequently termed the silent areas of the brain. Those which I shall consider are the anterior half of the right frontal lobe, the lower and extreme frontal tip of the left frontal lobe.

Tumors and abscesses are the two conditions that produce operable local disease, while tuberculosis, syphilis, pyemic abscesses and metastatic tumors are usually inoperable.

The symptoms of brain disease are usually (1) constitutional, general and dependent on the character of the disease; (2) compressional, dependent on the rigidity and confinement of the cranial wall, and relievable by rendering the cranium flexible, like the abdominal wall; (3) functional, resulting from the disturbance of the motor or other functions of the particular part of the brain affected. The silent areas of the brain give the symptoms in the first and second group but not in the third.

* Read before the Vigo County Medical Society, Feb. 10, 1914.

freely. The urine, blood, blood-pressure and all other findings corresponded with the slow but incomplete general improvement.

On November 8, nine days after operation, she had a series of convulsions, but none of them had any diagnostic element. If anything, they still indicated a left lobe infection. This brought Dr. Sidney Kuh into consultation. After going over all the symptoms and the history, he advised exploration of the left temporal region. Lumbar puncture was negative and normal.

On that afternoon this lobe was approached through the mastoid incision and the dura raised from the bone. It was thought that a little gas was liberated by the dull instrument. The dura was opened. The pia seemed normal. The knife was passed into this lobe parallel with the petrosa and twisted slightly, no result. The sigmoid sinus was again opened and more pus came out. The wound in the neck was healed.

From this time on the patient grew worse and died without giving symptoms localizing any other focus of infection.

The necropsy was done the next morning. The chest and abdomen exhibited no pathologic lesion. When the skull-cap was removed the superior longitudinal sinus and both lateral and sigmoid sinuses were found full of pus, containing the *Staphylococcus albus* alone. The right mastoid and its antrum showed no evidence of disease. The atrium was not therefore the right ear. The dura was now removed. It gave no evidence except a pachymeningitis along the two borders of the superior longitudinal sinus. It was a little more marked on the right than on the left side. One of the large veins in the pia running up over the right frontal convolutions was very greatly enlarged and thrombotic, but its significance was not guessed until later.

The brain was now sliced up and no lesion found in cerebellum or cerebrum except two.

1. The left cerebrum showed rapid repair where the exploring knife had been thrust in to search for an abscess.

2. Immediately under the right second frontal convolution and midway from the cortex on all sides was found an abscess 2 cm. in diameter, surrounded on all sides by highly vascularized brain tissue. The greatly enlarged blood-vessels appeared in the cut section as rays running out a centimeter in all directions through softening brain tissue and then uniting into a network of blood-vessels in the circumference. This abscess and the thrombi in the surrounding blood-vessels contained the *Staphylococcus albus* alone.

This case is reported *in extenso* because it is the most perplexing and presented the fewest symptoms of value in localizing the disease even to the hemispheres. It also presented the fewest compression symptoms, and the constitutional

could well have been due to the boils in various parts of her body.

We at once ask, how, why and when the focus appeared in the right hemisphere. We then ask when did the sinus thrombosis occur, and how far had it gone at the time of the convulsion on October 31? It must have been complete from the right hemisphere through the longitudinal sinus to the jugular in the neck for many days previous to the operation on October 31. Then the abscess must have been in the right hemisphere for a much longer time, probably for weeks or months.

CASE 2.—Mr. H., 35 years old, is a professor of church history in a Methodist theological school. He was born and brought up on a farm in Ohio and when about 15 years old he was left fatherless, to take care of the farm, relieve it of a small mortgage and care for his growing family of brothers and sisters. He did this by farming during the summer and working in a coal mine during the winter. He is a sturdy, well-built brunette and his average weight is about 170 pounds. During all his life he never had an injury or sickness that required the attention of a physician, until two years ago. At that time he was in a small town near Minneapolis, Minn., and was attacked with influenza, or some other febrile condition, which kept him in bed for several days, although he did not consider himself sick enough to warrant the physician's orders. Until the present time he has never employed any other physician. During December, 1912, about six months before the present trouble, he noticed that he had become somewhat constipated, and in spite of efforts to modify his diet and increase the activity of his bowels, he was unable to do so. He was obliged to take enemas and laxatives every day. Three months ago he began to have persistent, deep and extremely annoying headaches, but he never looked on them as sufficient cause to consult a doctor. He noticed, however, that his interest in his professional reading had lost its edge, especially after the middle of March, 1913. During the latter part of April he gave a course of lectures on church history to a conference in the northern part of Wisconsin, and on returning home he felt a peculiar dissatisfaction with his performance there. The lectures had been written out and prepared beforehand and had seemed to him worth while. They contained the substances of a thesis which procured for him the degree of Doctor of Divinity from Harvard University.

His habits of life were very regular and hygienic. He lived in a rather commodious, newly-built flat and had a moderate and perfectly regular table. He walked nearly two miles,

twice a day, to his lecture room, but otherwise had no recreation.

In May, after returning from his lectures in Wisconsin, he was walking one afternoon with his wife and when, on a corner not far from home, he suddenly "felt" himself paralyzed and unable to move his arms or legs properly. This was an extremely temporary affair. It did not cause him to fall down and it passed off shortly, but it alarmed him so that on returning home he sent for his physician. During this attack he felt the greatest disturbance in his *right arm*, and some disturbance in his *right leg* and the *right side* of his face. His physician looked on the matter as of trifling moment, but told him if anything of the kind occurred again to call Dr. William G. Stearns, a neurologist, who lived not far away. The next night, at dinner time, when he had his fork nearly to his mouth, his *right arm* became suddenly disturbed; he had a peculiar smirk rush over the right side of his face; he dropped his fork and was unable to speak for a moment. However, he went on with his meal, but was so alarmed that he sent for Dr. Stearns.

Before Dr. Stearns arrived the laxative which he had taken in the morning acted, and while he was sitting on the stool he felt his *right arm give way* and he fell toward the right onto the floor, but did not lose consciousness.

Dr. Stearns, in making his examination, found a normal pulse of 75, a normal temperature of 98.6, a normal blood-pressure of 120, and a slightly increased leukocytosis 10,000. The reflexes of his body were normal, though perhaps hardly as sharp as we could expect in a man of his training and age. There was no abnormal reflex of the eye, the pupils or the lower extremities.

After prescribing laxatives and intestinal antiseptics, Dr. Stearns called Dr. Oscar Dodds, a prominent ophthalmologist, in consultation. He examined the reflexes and the fundus on Saturday, the second day of his observation by Dr. Stearns, but could see nothing abnormal in the retina or the disk on either side. He recommended the use of alteratives and the attendance of a trained nurse. The blood was now taken for a Wassermann, which was reported negative on Monday, and Dr. Dodds again examined the fundus with Dr. Stearns and this time found that there was a distinct evidence of choked disk on the *left side*, with increased vascularity and a slight hemorrhage. The right eye at this time was perfectly normal, and sight was not impaired on either side to an appreciable degree.

During the following week, until Friday morning, consultations were held daily, and the loss in the mental condition of the patient and the increase in the amount of pain, the slow rise of the leukocytosis and the loss of vision in the

left eye, falling to 20/70, determined the faculty on an immediate operation and the hour was set for 9 o'clock Saturday morning. From the symptoms of this case, the disease was believed to be an abscess, and its location was fixed relatively in the silent area on the left side of the brain. The previous attack of grippe, and the hypothetical involvement of the frontal or ethmoidal sinuses were believed to furnish an atrium of infection; and the abscess was therefore localized low down in the prefrontal lobe.

I prepared a brief of the case and exhibited to the consultants my plan of operation. It was simply the turning down of the hairless scalp of the forehead over the eyes and the raising of a large flap of bone, leaving the superior longitudinal sinus and the frontal sinus intact, and reaching from this line backward nearly to the location of the fissure of Orlando. It was proposed to incise the dura parallel with the superior longitudinal sinus and as close to the border of the frontal sinus as possible, and then raise the frontal lobe and search for the abscess. The condition of the proposed operation at this time is represented in the sketch.

The patient was removed to the hospital on Friday afternoon and late that evening I was informed that, on account of the intimate relations between the Methodist Theological School and the hospital, the bishop had decided to have "the staff" of the hospital operate on the professor the next morning.

I hear, from rumor, that this was done at 9 o'clock, without securing from us any of the history of the case, which was in our hands, that the staff surgeons trephined over the left side of the skull and that the brain bulged out, showing great intracranial pressure. The autopsy was performed on Monday morning following, and an abscess was discovered, which was observed by one of the consultants to be in the lower anterior portion of the left frontal lobe. It was about three quarters of an inch in diameter and contained two microorganisms, a *Staphylococcus albus* and an organism resembling a colon bacillus.

CASE 3. The case of Miss D., in which over 6 ounces of pus was removed by me from the right frontal lobe, which had evidently been there twenty years without symptoms, is recited in full in volume 64, page 99, of *The Journal of the American Medical Association* for January, 1905, and does not need to be recited here.

There are many reflections that these three cases arouse. The principal one is the enormous destruction which may befall the silent areas of the brain without giving rise to a fatal termination, and even without giving diagnostic symptoms.

The new era of diagnosis which has opened with the Abderhalden reaction, and the new era

of intracranial surgery which Hoagland's electric craniotomy promises may bring relief for many now neglected cases.

In our zeal for medical organization of late years, we have neglected those ethical amenities that in former years graced our profession and protected our patients at the same time from the disaster that through the lack of courtesy of one medical colleague and the meddlesome fumbling of a church dignitary overtook a helpless and worthy man.

The relations of science are not the only ones we have to consider. There is a condition of equity between patients, doctors, hospitals and the public that needs careful study and judicial consideration. There are abuses that come not from quacks or from low and ignorant medical tradesmen; they come from entrenched selfishness.

TREATMENT OF HETEROPHORIA AND HETEROTROPIA *

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The views expressed in this paper are the outcome of experience gained from the examination and treatment of a few over twelve thousand cases of errors of refraction and muscular imbalance. Nothing is claimed in the way of originality, in either methods of examination or treatment, and members will recognize that, in some instances, where there is apparent originality it is but a modification of certain well-known procedures.

True orthophoria appeared to be the exception, and a slight esophoria of two or three degrees so constant as to suggest this to be the condition of the average, if not the normal eye. However, it must be remembered that every case examined presented symptoms suggesting some eye trouble, and an examination of a like number of cases without eye symptoms might not give confirmatory results. Next to esophoria, left hyperphoria appeared the most frequent and then followed in the order named, exophoria and right hyperphoria. Cyclophoria (or retinal declination) did not figure so frequently in my earlier examinations but, with increasing care and a modified method of examination, it appeared in a surprisingly large number of cases.

I have not been able to confirm the attempt to connect the location or character of pain with

any especial error. It has seemed to me, however, that those illy defined symptoms sometimes embraced under the term "ocular neurasthenia" were, very frequently, closely connected with declination of the meridians of low degree.

For examination of muscle balance at a distance, I have discarded the variously lighted electrical instruments and returned to the candle. For reading distance I use the simple dot and not the dot and line. The examination for vertical and lateral varieties of heterophoria is easily and quickly made with any good phorometer. I generally use the Stevens' model as being the most convenient. For the detection of cyclophoria, especially of low degree, great care is necessary. It has seemed to me failure to find declinations as frequently as they really exist has been due to the inaccuracy of the rapid methods, and neglect of the accurate methods by reason of their tediousness. The Maddox rods when used in the ordinary way are rapid, but inaccurate, while the Stevens' clinoscope is accurate, but tedious. To secure the advantage of rapidity and accuracy I have resorted to a modification of the rod method. This presents one great advantage, namely, that of being easily used in the case of young children. Experimenting upon myself, and others, I came to the conclusion that it is easier for the average person to detect a departure from a perfectly vertical than from a perfectly horizontal position, and for that reason I use the lines of light in the former position. Again, it was shown that the closer the lines of light were made to approach one another the more accurate the judgment of their relative position. When, however, the lines approached a point where the most accurate comparison could be made, fusion often took place and defeated the object of the test. To meet this condition the following modification was devised. Compound Maddox rods were employed, a white one before the right and a red one before the left eye. In a cell of the phorometer, situated about one inch behind the white rod, was placed a pale blue glass to reduce the brilliancy of the white streak and, in a like cell, behind the red rod a stenopeic slit with its long axis horizontal, corresponding to the long axis of the rod. When the candle is viewed through a disk thus placed the original red line is seen to be broken up into a string of red beads. By revolving the prisms of the phorometer the beads and the white line may be brought almost in contact and compared. Indeed, they may be superimposed. In the case of young children the examination is surprisingly easy. The white line is first made perfectly ver-

* Read before the Indiana State Medical Association at West Baden, September, 1913.

tical, and rotating the prisms the red beads are brought close to it and the child told to say when the beads are strung on the white string. The red rod and prisms are rotated until this is accomplished and the position of the rod noted, indicating the presence or absence of cyclophoria.

The treatment of heterophoria and heterotropia has been based exclusively on the result of the examination at distance. I have viewed the condition at the reading point as growing out of that for distance, and have felt that if the latter is corrected the former may be allowed to take care of itself. For example, esophoria at distance, increased at the reading point, was interpreted to mean overaction of a constantly overstimulated and irritable muscle from the added stimulus of near work. Esophoria at distance, with exophoria at the reading point, was considered an example of a muscle so nearly exhausted from long-continued overstimulation as to actually give way when an added demand was made upon it. Exophoria for distance, with esophoria for reading, was held to show that probably there had been an antecedent esophoria for distance also and the long-continued overstimulation had rendered the muscle less sensitive to slight stimulus, by reason of partial exhaustion, but when an added stimulus was furnished, as at the reading distance, it passed into a state of temporary spasm. Such fatigue spasm is not uncommon in other parts of the body.

The treatment of heterophoria and heterotropia depends on the age of the patient. In very young children the detection of heterophoria is of course impossible and treatment is directed to the heterotropia, when it manifests itself. In children too young to wear glasses the parents are informed that glasses will be necessary in all probability as soon as the child has reached the proper age. In such children if the heterotropia is intermittent and does not continue long at a time, no attention is paid to it. If, however, it is intermittent, but continues for some hours, atropia is used in both eyes for one or two weeks at a time and then discontinued for a like period. If it is limited to one eye, and more or less constant, atropia is used in the non-squinting eye at intervals or almost constantly, depending on the result. The non-deviating eye is never occluded, as I believe such practice actually favors the trouble. It has seemed to me that anything which interferes with attempts at fusion will be worse than useless. In conformity with this view, and not being able by reason of the age of the patient to raise the vision of the poor eye to approximately that of the good, I reduce the good

one to that of the poor, hoping thereby to excite the fusion center. If everything fails I operate early. In older children the above treatment is reinforced by glasses. While I have tried the stereoscope I have had little or no success. It is possible that my want of success has been due to my inability to have the parents persist in the face of lack of manifest improvement. In still larger children, and in adults, a full correction is given and operation proceeded with if relief is not obtained, or at least marked improvement, in six months. Prisms are never given for constant use except in low grades of hyperphoria, or as a temporary expedient for exophoria. After a fairly thorough trial of muscle exercises I have discarded this method, as it has not been productive of lasting results. I have had no experience in the use of cylinders for exercising the obliques.

Whether the operation shall be a tenotomy or an advancement in heterophoria has depended on the extent of the ocular excursion, in the different directions, as measured by the tropometer. However, in a general way, slight deviations have called for tenotomies and large ones for advancement. I have rarely operated on the inferior recti and never on the obliques.

In tenotomy I rely on the knife and exclude both the scissors and the strabismus hook, except that the former is used to make the initial "button-hole" in the conjunctiva, capsule and tendon. The Stevens method is followed in the main. With the fine forceps a firm hold is taken over the middle of the insertion of the tendon to be tenotomized. The scissors are now used to make an opening of two millimeters in the conjunctiva, capsule and tendon. Still holding the above structures firmly in the grasp of the forceps, a small tenotome with a straight cutting edge of 5 mm. and rounded back and point, and bent at an angle of forty-five degrees to the shaft, is introduced into the opening and the tendon is divided by a gentle sawing motion, first one half and then the other. During the section of the tendon the capsule recedes before the edge of the knife and is uninjured. The tendon is cut to its margin but no more, and that part of the capsule in front of its insertion is carefully preserved. The knife is next used as a searcher in a manner similar to a strabismus hook, and any resisting bands found, severed by a sawing motion.

To me the knife presents many advantages. The cut is smooth and clean and the healing prompt. There is lessened pain, as in my experience cocaine, while it abolishes the pain incident to cutting, does not completely do so with refer-

ence to pinching, as in the use of scissors. Finally, there is no mutilation of surrounding structures. Every one who has attempted to pass one blade of the scissors through the button-hole in the tendon, and insinuate the other between the tendon and overlying capsule, and divide, as is advised, the tendon by successive snips without tearing the capsule, must confess to himself that he frequently, if not generally, included the capsule in the bite of the scissors. I may add that the knife I employ is very simple and was made by grinding down an old scarifier and sharpening it on the reverse side.

In advancement the operation for heterophoria and heterotropia differ somewhat and each will be given in detail. First, the preparation of the suture: This I have always regarded as very important and, following my custom of years standing when practicing general surgery, I boil my silk in yellow wax. I notice a recent recommendation to boil suture material in a mixture of white wax tempered with vaseline, but am certain if one will follow the plan of using plain yellow wax he will note its superiority. It is easily threaded, and twisted in case it is advisable to do so, and, what is especially to be commended, will stay twisted. Number 4 or 5 silk is generally used. This is prepared by immersing it in hot yellow wax for five or ten minutes, which serves the double purpose of sterilization and impregnation of the silk with the wax. Silk thoroughly impregnated should appear translucent when held up to the light.

In heterophoria an incision 2 mm. long is made over the middle of the tendinous insertion. The initial incision, made with the scissors, should involve only the conjunctiva. The points of the scissors are now turned toward the cornea and the conjunctiva undermined up to the corneal margin over a space equal to the breadth of the tendon. The forceps pushed into the wound next grasp the capsule and tendon, which are then both button-holed. Should the forceps still retain a firm hold the knife is introduced through the button-hole and the tendon is divided as in tenotomy. If the tendon escapes from the grasp of the forceps the crochet-hook is introduced, and the tendon dragged forward and held secure. After the tendon is freed from its attachment to both the sclera and the overlying capsule and from its lateral prolongations, the suture is introduced as advised by Stevens and the tendon dragged into the bottom of the conjunctival pocket. In passing my sutures I have not relied on the support afforded by the conjunctiva alone, as has been recommended, but have made use

of the episcleral tissue as an anchorage. I do not attempt over-correction and frequently find that an apparent perfect correction has passed within an hour into under-correction, which increases for several days, and then returns to its first condition. In operating for cyclophoria I of course operate on the margin and not the central part of the tendon whether it be a tenotomy or advancement.

In advancement for heterotropia the procedure is somewhat different. In common with most operators I have found the chief if not the sole cause of my failures to be the cutting of the suture from its scleral insertion. In my own mind I had come to expect that the suture at the time of its removal would be found to have cut its way out of the sclera. Recalling an experience of many years since, when in attempting to suture the divided ends of a tendon and finding them instantly pulling apart by reason of muscular traction, I, in desperation, drew the tendon and muscle as far as possible from the sheath and then literally "basted" it to the overlying skin and fascia, so that traction was on these structures and not on the end of the tendon, which was then easily sutured, it occurred this might be done on the eye muscles. To that end the operation is made in the following way: First make the incision and undermine the conjunctiva toward the cornea, as in advancement for heterophoria. Then thoroughly free the tendon from all its attachments both to the sclera and overlying capsule and lateral prolongations, using the knife and scissors as previously described. Do not excise any of the tendon or conjunctiva, and limit the conjunctival and capsular incision to a little less than the width of the tendon. The loosened tendon is seized by the pointed forceps or crochet-hook, but never with the clamp, and pulled forcibly toward the cornea, much as if one were trying to pull a retracted muscle from its sheath. While it is held in this position take a needle threaded with a No. 4 or 5 silk suture, prepared with wax, doubled and twisted together. Enter this at a point corresponding to the lower edge of the stretched muscle, and pass it in and out several times through the conjunctiva, capsule and muscle, and finally cause it to emerge at a point corresponding to the upper edge of the muscle. The muscle is now in a sense "basted" to the overlying tissues, and its tendon protrudes as the tongue might be made to protrude between the teeth. Next a suture is placed in the end of the tendon and carried into the pocket toward the cornea, exactly as if an advancement for hetero-

phoria were going to be made. This suture is not intended to do more than to guide the tendon into the pocket, and hold it spread out for a few hours until adhesion has taken place. The "basting" stitch is next carried forward over the conjunctiva and the needle entered near the corneal margin almost on a level with its point of emergence from the conjunctiva over the muscle. It is buried in the episcleral tissue and emerges about 5 mm. below. The two ends are next tied, the knot lying in a line corresponding to a line drawn from the lower edge of the muscle to the cornea. Next the little suture used for guiding the tendon is tied. The tendon is thus forced into its new position and the tension is on the embedded scleral portion and the portion of the suture "basting" the muscle and overlying tissue and not on the extremity of the tendon. Cutting from the sclera will begin in a very few hours, and the muscle tends to recede, but as it cuts its way out of the sclera, which it is bound to do before adhesion is sufficiently strong, it will expend its force on the conjunctiva and capsule to which it had been "basted" for some time longer, and, indeed, until these stretch. It has seemed to me that the severe stretching of the muscle in the operation leads to its temporary loss of power, and favors the success of the operation.

This paper is not pretended to be exhaustive. Many little details have been omitted. Neither have the results always been successful but have been better by far in the hands of the writer than the other methods which he has employed.

Willoughby Building.

DISCUSSION

DR. W. F. HUGHES, Indianapolis: The retrospective study of twelve thousand cases is certainly worthy of consideration by any state medical association. A few years ago it seemed to be the fashion for oculists to ignore the entire musculature of the eye and the reflex symptoms arising from its effects. Possibly this position was due to the fact of the unsatisfactory results that sometimes followed where the treatment was given without the careful, tedious and scientific investigation needed to determine the exact structural or functional effect. Often the location of the exact muscle at fault in heterophoria is a distinct problem, yet the obscure muscular balance is frequently the one that produces the most profound reflex symptoms. I think the essayist well said that rest and general tonics may finally be shown to be the proper therapeutic measures in conditions of heterophoria. We may prescribe prism exercises and rest, or advise operative pro-

cedures, with a reasonable certainty that benefit will be derived by the patient.

The paper has certainly proven that a complete muscular examination of the extra-ocular muscles should involve a testing of the duction power. Careful testing of the duction power may occasionally show it to be far below normal in both planes. The exercises recommended by Savage have proven satisfactory. However, general tonics as well as nerve stimulants may be and usually are indicated in these conditions. While exercises in the treatment of small heterophoric errors have proved fairly satisfactory in my hands in selected cases, still I find that the general tonic treatment is excellent in association with them. In all these the oculist must have the hearty cooperation of the patient.

The treatment by prisms is usually carried out by the daily use of the prism, in the horizontal muscle cases. Care must be used to avoid fatigue. The exercises must be stopped whenever there are any symptoms of exhaustion, even if the limit of five or ten minutes customarily used has not been reached. Whenever properly carried out, more or less permanent results may be expected.

The statement of von Graefe that what disappear in such treatments are the symptoms of asthenopia, the disturbance of equilibrium between the antagonized muscles remaining, may be accepted as usually true. Still many patients prefer occasional courses of muscle training, at probably intervals of years, rather than to submit to the tedious operation usually required in heterophoric operations. When the unavailability of muscle exercises is demonstrated, or, having been tried, failed to produce the desired results, the incorporation of prisms in a position of rest should receive careful consideration before any operative measures are undertaken.

Prism exercises in vertical deviations have, as a rule, been unsatisfactory, and we are compelled to rely on prisms in a position of rest, which will generally give gratifying results.

The secondary strain of the oblique muscles in oblique astigmatism is a condition that should be carefully considered in every case of refraction. Since the retinal image is displaced toward the meridian of greatest curvature and the slightest deviation produces distortion of the retinal image in oblique astigmatism this must necessarily throw more or less constant strain on the oblique muscle. Consequently, oblique astigmatism is a much more aggravated type than the form with vertical or horizontal axes. It is the invariable rule of the discussant to correct these forms of astigmatism fully in every case. Surprising results are accomplished by the correction of very small errors of oblique astigmatism. However, the relief of symptoms is not always immediate, since the life-long habit of the oblique muscle cannot be broken at once.

When the muscle exercises and prisms in a position of rest have failed to give the desired result, the oculist must consider the operative phase of the subject. Few operations in surgery require a more profound study of existing conditions than those for heterophoria. Correct diagnosis is absolutely necessary to success in these operations. The knife and method described and devised by the essayist have been used by me a number of times with complete satisfaction. The muscular insertion can be released with much less traumatism and disturbance of the normal relations of the tissues by this method than by any other previously used or observed.

A question arises as to the operation described by the essayist in the heterophoria of high degrees—whether it would be generally satisfactory with other operators. Setting the muscle forward without clamping the anterior end can only give a small amount of advancement. Frequently more advancement is desired, and the discussant has always felt that the muscle should lie broadly against the globe, in order to favor the rapid and firm union. In my advancement operations in heterophoria with a marked deviation, I have usually followed the procedure described by Worth, which involves an excision of the ends of the muscle tendon. I do not consider a clamp necessary in this operation. A double tenaculum may be used to hold the muscle in the normal shape while the suture is being inserted.

In my advancement operations for both heterophoria and heterotropia the suture is somewhat embedded in the episcleral tissue, and it always seems to be the most uncertain part of the operation. By proper technic in altering the tension of the recti muscles, the plane of the operation may also be changed, thereby correcting any complicating cyclophoria.

DR. JOHN R. NEWCOMB, Indianapolis: I would like to ask Dr. Morrison whether, after the operation is performed as described, he advises exercises? If so, what varieties of exercises for the muscles, and also in those cases which have existed for some time, where there is possibly a loss of the fusion sense, whether or not that is apt to be reestablished? If so, in how great a length of time?

DR. FRANK A. MORRISON, Indianapolis: I never advise exercises myself, and I do not think fusion is reestablished. My own feeling has been that if there is heterophoria without the fusion power the eyes do not give much trouble. I usually test the fusion power, and if it is present, I proceed in my effort to bring the eyes together.

DR. W. N. SHARP, Indianapolis: I think Dr. Morrison is to be congratulated on writing this paper practically from his own experience in these cases. He is also to be congratulated on having devised these original methods for the

division of the tendon muscle, and for using the knife, particularly, which is the instrument principally used by general surgeons for the division of all tendons rather than the scissors. Personally, I use the Stevens' tenotomy scissors.

It is very commonly found that persons with any great amount of refractive error have some muscular deviation. It has been my experience that these phorias and retrophorias, esophoria or exophoria, will often correct themselves, in low degrees—probably under three degrees—if the refractive error is properly corrected. That is, in the course of time. It is often the case, too, with an exophoria; we have more or less disturbance of the vertical muscles, either right or left—hyperphoria present of a low degree. This is very often corrected of itself, without any operative procedure or without any prismatic exercises, provided the refraction is properly corrected. Particularly is this the case with astigmatism of an irregular type, in which the patient is trying to correct that by a tilting motion of the head. I have often asked patients if it is a habit to hold the head that way, and they don't know that they do it—it is done unconsciously. But it is very commonly the case that the patient will tilt the head in the irregular type of astigmatism.

I believe that no operation should be attempted in these simple phorias; that the refractive errors, if properly corrected, will cause these phorias to correct themselves in the course of time. But I believe we should operate after a certain length of time.

I want to speak of a case of a child with congenital convergent squint, in which I did a tenotomy of the internal rectus and advanced the external rectus, and had a beautiful result. But in doing the tenotomy of the internal rectus, in getting my hook on the tendon, I found that I lost a little vitreous. The sclera happened to be a little thin. In reading up on the subject, I found that Dr. Knapp, in Oliver's System of Ophthalmology, says that he met with a similar accident in an operation he did, and that set the tongues of other men to wagging, and he found that he was not the only man who had met with this accident. So I felt perfectly at ease when I knew that such men as Knapp had these accidents.

I believe that prismatic exercises for the lower forms—if they are not corrected by proper refractive correction—are very beneficial, and will often correct these forms of mild phorias. But heterotropia or an oblique squint should, I think, be interfered with surgically, after the case has been thoroughly gone into refractionally. I think the method of Dr. Morrison is a most excellent one.

DR. MORRISON (closing the discussion): I have nothing to add in closing, but would like to tell Dr. Sharp what happened to me, which was worse than the accident he had. Four or five years ago

I had a patient with divergent squint. She told me that she had had an operation on the internal rectus muscle and the divergence had taken place. The eyeball was small and I asked her if that was congenital, and she did not know. As I went to advance the internal rectus muscle, and am certain I did not perforate the sclera, I caught the muscle and pulled it forward, and I lost quite a lot of vitreous. I deliberately stitched up the hole, drew the muscle forward and after she had gotten over it she told me that her eye was not small before the first operation. The loss of vitreous did not do any damage and the advancement was a success. So I think the perforation had occurred at the first operation and that a little connective tissue had healed over and I had deliberately dissected it off again. But in that case it did no damage. She had not much sight in that eye anyway, so it made no difference.

SYMPTOMATOLOGY OF URETHRAL STRICTURE *

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INDIANAPOLIS

Stricture has been defined as any narrowing of the urethra irrespective of its nature or cause. A study of the anatomy of the normal urethra discloses the fact that there are narrowings constantly present, namely, at the meatus, posterior boundary of the fossa navicularis and the membranous urethra, the portions of the canal between these points being considerably larger, and the channel possessing throughout its extent, except the meatus, a considerable degree of elasticity or dilatability.

Considering the urethra as a delivery hose for the urinary reservoir (the bladder) and that it should provide free and easy passage of urine from the bladder, giving to the stream proper size, shape, poise and direction, a better definition would be, "any abnormal narrowing in the course of the urethra which interferes with the free passage of urine or its normal dilatability, constitutes a stricture."

The Varieties of Stricture are, Spasmodic, Congenital, and Organic.

Spasmodic stricture, being a temporary spasmodic closure of the canal by contraction of its muscular coats due to fear, pain or reflex irritation, may be more properly designated as a symptom rather than a variety.

Congenital stricture is more frequently found at the meatus, and occasionally in the membran-

ous urethra. It is in reality an exaggeration of the normal narrowing at one or other of the points mentioned, and unless very small or should become inflamed from some cause, seldom produces any symptoms. It sometimes happens that by the injection of an irritating solution into the urethra (usually for the prevention of gonorrhea), a mild urethritis is set up in cases of abnormally small meati. The obstruction to the outflow of urine by the abnormally small meatus causes an over-distention of the urethra and thus automatically keeps up a urethritis which may result later in true stricture formation. However, congenital stricture of the meatus rarely produces any symptoms, and as Keys aptly puts it, "Most men can go through life in blissful ignorance of the size of their meati unless they fall foul of the genito-urinary surgeon, who, to permit the passage of his sounds, may justly enlarge an orifice that had otherwise been sufficient for Nature's claims."

Organic stricture may be caused by inflammation of the urethra, either simple or gonorrheal, or injury. Narrowings of the urethra caused by injury are termed traumatic stricture, whether the violence be in the form of contusion, laceration, incision, or cauterization, and the resulting lesions are more rapid in their development and more dense and more resistant to treatment than those resulting from inflammation, which are slow in progress and vary greatly in extent of lesion.

Probably the most frequent cause of injury to the urethra is by kicks, blows or falls, in which accidents the urethra is wounded as above mentioned and the usual site is the membranous or bulbo-membranous urethra. The passage of a sharp vesical calculus may lacerate the urethra, or the unskilled passage of urethral instruments, or foreign bodies into the urethra may also result similarly.

A point in reference to the development of traumatic stricture may be mentioned here: namely, that when the urethra is injured there is usually more or less infiltration of urine into the surrounding tissues, rendering the process of healing slow and resulting in the formation of extensive scar tissue. In cases of ruptured urethra where repair is made early and the urinary stream diverted from the injured tissues, much less dense strictures result.

Organic strictures are almost all gonorrheal in origin. An occasional severe simple urethritis, urethral chancre, ulcer or neoplasm may produce a stricture, but these are rare. Sir Henry Thompson's statistics show gonorrhea to be the cause in

* Read before the Indiana State Medical Association, West Baden, September, 1913.

75 per cent. of cases. Martin's figures are somewhat higher, i. e., 85 per cent. in 219 cases. Christian found gonorrhea to be the cause in 90 per cent. of 400 cases. An explanation why stricture develops in some cases of gonorrhea and not in others is difficult to give, but it probably depends upon the duration and severity of the disease rather than the number of attacks. The use of strong injections may at one time have had its influence, but of recent years the custom of using caustic agents in an attempt to abort gonorrhea has seldom been followed.

Time of Occurrence.—Strictures usually develop between the age of 20 and 45 years. The reason is obvious, as gonorrhea is more frequent between these ages. The female urethra is not wholly exempt, but stricture of the urethra in women is rare. It has been stated that the colored race is more exempt than the white; that stricture occurs after gonorrhea once in every twenty-three cases in the negro, while in the white race it occurs once in every eight cases. I do not know the authority for this, but think perhaps the opportunity for diagnosis may have been the factor in formulating these statistics, the colored race as a rule being less disturbed by the presence of a slight discharge or urethral irritation than the white.

The time of occurrence varies greatly. In Young's series of 400 cases, the longest interval from the time of the urethritis until the appearance of the first symptoms was thirty-seven years, while five and ten years were not infrequent. As a rule strictures do not develop to the stage of producing symptoms before two years have elapsed, after an attack of gonorrhea, and the occasional exception to this rule is rare. It is also rare for stricture to give rise to symptoms after ten or twelve years. In traumatic stricture, the time of occurrence is much shorter, usually from a few weeks to a few months.

The Number of Strictures.—Strictures are usually single; various observers have given the percentage of cases of single stricture from 80 to 85 per cent. and two or more in the remaining 15 or 20 per cent. of cases.

Varieties of Strictures.—First as to caliber. The older writers classified strictures admitting a No. 15 F. sound as of large caliber, and all strictures under this size as of small caliber; those admitting only a small whalebone as filiform, and those not admitting the smallest bougie as impermeable (to instruments but not to urine). Keyes gives the dividing line between large and small caliber stricture as 24 F.

For convenience of description of the sensation obtained by the exploring instrument, strictures have been classified as linear, annular, and tortuous. The linear stricture imparting a sensation of a very sharp obstruction like that produced by a thread encircling the urethra. The annular like a band, and the tortuous as a combination of the linear and annular with irregularities. The terms, soft, fibrous and inodular are descriptive of important features.

Location of Strictures.—The observations made by Sir Henry Thompson upon the examination of 270 cases have remained unchanged, as the findings of others have tended towards confirming his conclusions. He divided the urethra into three regions:

1. Includes the membranous urethra and the first inch of the spongy urethra.
2. From the anterior limit of region No. 1 to within $2\frac{1}{2}$ inches of the meatus.
3. The anterior $2\frac{1}{2}$ inches of the urethra.

He found 67 per cent. in region No. 1
16 per cent. in region No. 2
and 17 per cent. in region No. 3

Strictures of the prostatic urethra are very rare and always traumatic. (Keyes.)

This is not to be confused with contracted vesical orifice, which is a dense fibrous contracture of the bladder neck, occurring in both young and old, and is the result of chronic posterior urethritis from vesical calculus, prostatic hypertrophy, or is post-gonorrheal.

Pathology.—Organic stricture is a cicatrix of the urethral wall due to inflammation following disease or injury and manifests a constant tendency to contract. This tendency to contract which is always present to a greater or less degree is probably due to irritation incident to the impact of the stream during urination. If the stricture is kept dilated up to a size where little obstruction is produced, little tendency to contract is noticeable.

As has been stated before, the severity of the inflammation and the duration of the attack probably have more to do with the formation of strictures than repeated mild attacks. In the more virulent attacks the involvement of lacunae and glands and circumscribed or diffuse periurethritis, is likely to result in permanent sclerosis in and beneath the mucous membrane.

The indurated tissue is most often built up from the floor. This is notably true in the bulb, the orifice being eccentric and usually near the roof. The reason for this is obvious when we consider the loose structure of the floor of the canal at this point and the distinct pocket of the bulb which favors the localization of infection; more-

over it is the floor of the urethra that receives the force of an injury from without and is also subjected to greatest damage by over-distention when the urethra is obstructed.

In extensive strictures of the deep urethra the irregularities show a progressively smaller caliber in the direction of the bladder, owing to the stronger impact of the urine upon the deeper extremity of the stricture. The extent of the process may vary from a slight thickening of the mucous membrane with congestion, to true cicatricial tissue with granulations. In more advanced cases a band or mass of indurated tissue may replace the mucous membrane throughout its depth, even involving the corpus spongiosum. This tissue may be slight in amount, cicatricial in character and tightly contracted, or it may be excessive in amount and nodular so as to be palpated from without as a cartilaginous mass. Behind the stricture the canal is dilated and more or less inflamed.

Microscopic.—During the height of acute urethral inflammation, the epithelia and sub-epithelial tissues are infiltrated with leukocytes. The glands and crypts are the most important centers of inflammation. The orifices become obstructed from swelling and the infiltration extends into the deeper tissue (even into the corpus spongiosum) giving rise to sub-mucous infiltrations that are often the cause of chronic urethritis.

If the periglandular exudate becomes organized into cicatricial tissue or the inflammation within the glands and crypts persists as a chronic catarrh, or results in occlusion of the orifices and the formation of small abscesses, terminating by rupture into the urethra or invasion of the surrounding tissue with resultant submucous sclerosis, we have in the process of change from an acute to a chronic urethritis, a thickening of the urethral walls with certain features of the cause still in operation. If the sclerosis is slight the surface is swollen, red and eroded in spots with here and there the inflamed orifices of glands and crypts. This is the soft infiltration of Oberlander. More marked sclerosis causes an anemia of the mucosa which is lighter in color than the healthy tissue, while here and there are opalescent spots where the chronically inflamed columnar epithelium has been replaced by or transformed into a squamous type with a tendency to heaping up into thick callous masses. Erosions, ulcerations, bleeding points, inflamed gland orifices, or small papillomata are to be seen. The pale thickened and rigid mucosa loses its folds and striations, and becomes what Oberlander described as hard infiltration. This sclerotic process more advanced becomes stricture. The soft infiltration

may heal spontaneously but the hard infiltration requires treatment by dilatation and leaves a permanent scar. In short, we have in the acute inflammation an infiltration of the mucosa and submucous tissues which may heal spontaneously, or the process becoming chronic with the transformation of cellular infiltration into fibrous tissue, with contraction resulting in narrowings of the canal and constituting true strictures.

Under symptomatology the varieties of strictures must be again considered. It is apparent that the symptoms produced by a stricture of very small caliber will differ greatly from those of larger caliber, the degree of obstruction being the important feature of their variation.

“Organic stricture may exist in a man for years, producing no symptoms and unsuspected. On the other hand, the usual symptoms of stricture, i. e., gleet, the irregular stream of urine, and the final dribble, are of daily occurrence among men who have not and never had stricture.” (Keyes.)

A gleet discharge from the urethra is, however, one of the most constant symptoms, and usually the first noticed by the patient. If a stricture develops soon after gonorrhea, the discharge continues, but more often there is an apparent cessation of discharge for a considerable period, the urine continuing turbid with the presence of shreds. The discharge may be so slight that the patient takes no notice of it or it may be seen only of mornings and be accompanied by glucing of the meatus. From sexual excesses or overindulgence in alcohol, recurrences of a purulent discharge occur which the patient believes to be a new infection or “a strain.” Under the influence of local treatment these attacks of recurrent urethritis often subside to their former state of a slight mucoid discharge and the patient thinks he is cured. This gleet discharge which usually arises from behind the stricture, rarely ceases entirely until the stricture is fully dilated.

Frequent Urination is probably the commonest symptom of stricture next to gleet discharge. A slight narrowing may give rise to frequent urination, probably due to congestion of the bladder. In more pronounced cases urination becomes quite frequent and somewhat painful owing to infection and cystitis.

Pain may occur during urination and be felt at the seat of stricture, at the glans penis, neck of bladder, or in the perineum, or it may be present constantly as a result of inflammation due to decomposition of retained urine, the whole canal

being in a state of soreness with a feeling of weight or aching in the perineum or rectum. An aching pain in the urethra, glans penis, in the testicles, or spermatic cords, the hips and back, may be present, or the patient may complain of a feeling of constriction about the penis. Neuralgic pains are not uncommon, affecting the thighs, legs, or soles of the feet. I saw a patient with neuralgic pains in the hips and back which confined him to bed. He had no urethritis or frequency of urination, but on close questioning admitted gonorrhea some ten years previously and his stream was found to be quite small. Exploration disclosed a filiform stricture of the deep urethra. Sounding relieved the pain sufficiently that he was soon able to be about.

Hemorrhage is not an uncommon symptom and is usually seen at the close of urination, though it also may precede the first few drops of urine. Exceptionally this symptom may be prominent.

Sexual disturbances are not an infrequent symptom of stricture and relief of failing sexual power may be the object of the patient's visit to the physician, whose examination discloses a stricture as the cause.

Complete impotence, infrequent, feeble or painful erections, premature, delayed or painful ejaculations of semen are some of the variations of sexual disturbances complained of. There may be no discharge of semen at all during the sexual act but often dribbling away afterwards or running backward into the bladder to be washed away by the next passage of urine.

Changes in the stream will become noticeable as the process of sclerosis advances and the stricture tightens. The stream becomes smaller and irregular, often forked (particularly at the start) or splattering. The forked or splattering stream is often caused by the partial breaking of the glued meatus giving at first a double stream which soon unites to form one.

Strictures at or near the meatus are apt to modify the shape more than the force of the stream. On the contrary, deep strictures affect the force of the stream more, often allowing the stream to fall from the end of the penis in an irregular stream wholly lacking poise or drop by drop.

Retention of urine resulting from increased congestion or acute inflammation behind a stricture may be brought on by excess in eating or drinking, from chilling of the body or from constipation. If the retention is not relieved the bladder becomes over-distended and after many hours a few drops of urine may pass. If this con-

dition continues the contractile power of the bladder becomes permanently impaired, resulting in atony of the bladder, and in incontinence. Occasionally in the wall of the dilated pouch behind a stricture or in the cicatricial mass itself, an abscess may form, accompanied by an acute septic febrile reaction. This abscess may break into the urethra or extend into the perineal tissue, burrowing through the subcutaneous tissues of the external genitals, the thighs or groins and opening externally, forming one or more fistulous tracts through which more or less of the urine escapes. Or, beginning as an abscess, ulcer, or gangrene of the urethral wall or the breaking of the thinned wall behind the stricture, a more rapid leakage takes place into the surrounding tissues, often forming an enormous edematous swelling, which, if unrelieved, results in pus formation and extensive necrosis or loss of large areas of tissue from gangrene.

The effects of long continued obstruction from urethral strictures upon the bladder and upper urinary organs may result in atony of the bladder with thinning of its walls or a concentric hypertrophy with thickened walls and a diminished capacity (in which latter cases dilating the stricture does not relieve the frequency of urination), dilated ureters, and kidneys with pyelonephritis as in obstruction from prostatic hypertrophy. The straining efforts to pass urine frequently result in hemorrhoids and prolapsed rectum, and occasionally hernia.

The retained products of inflammation, as pus and mucous, within the bladder, may be the nucleus of vesical calculus.

In conclusion, I would call attention to the following:

1st. Stricture of the urethra, particularly when of large caliber, are often overlooked as a cause of chronic urethritis; the use of the bougie-a-boule and the urethroscope being necessary for their detection.

2nd. Eighty-five to 90 per cent. of strictures are gonorrheal in origin and the severity of the inflammation rather than the number of attacks is responsible for the tissue changes resulting in stricture.

3rd. All strictures manifest a constant tendency to contract.

4th. Neglected strictures may result in periurethral abscess and urinary fistulae or urinary infiltration with great destruction of tissue from necrosis; also in bladder, ureter and kidney changes irreparable by treatment of the stricture.

DISCUSSION ON THE PAPER OF DR. HAMER

DR. W. S. EHRLICH, Evansville: We have with us to-day a very prominent genito-urinary man, and I would suggest that Dr. Townsend of New York be asked to open this discussion. I will gladly relinquish my place in his favor.

DR. TOWNSEND, New York City: I feel that I am more or less of an interloper, but I congratulate you on having had such a thorough exposition on the subject of stricture of the urethra as you have had to-day. Some of the things which are important are the diagnosis of stricture and urethral infiltration, which we must include from an anatomical and pathological standpoint under the same head, because the whole condition is that of post-inflammatory formation, the formation of fibrous tissue.

If you will hark back to the pathological states, you will recollect in your first appearance of inflammation you have a slowing of the bloodstream, adherence to the sides of the lymphatics to the white corpuscles in wandering through the capillary wall. These corpuscles wander into the tissues, become indifferent embryonic corpuscles having the power to convert into fibrous tissue corpuscles. These corpuscles develop slowly into fibrous tissue, and as the condition progresses we have distinct clinical pictures. If, for instance, you take a view of a urethra through the urethroscope where the inflammation is fairly recent, you do not find thoroughly formed connective tissue. You find a thickening of the hitherto velvety mucous membrane and a lack of resiliency, that is, where the fibrous tissue formation has been very slight. From that on it varies to the forms as described by the master writers—Oberlander, Kohlman, and other German students—who have made large inroads into the discovery and work upon these matters. We find all grades from this so-called soft infiltration to the complete formation of fibrous tissue. These are very definite to the urethroscope, varying from a slight loss of resiliency to deep white cylinders. It shows no blood vessels. If we could section the urethra we would find all the three layers of epithelium have disappeared, squamous, cuboidal and columnar types, and we are directly down on fibrous tissue; therefore, we get by a view through the urethroscope exactly at what period this inflammation has reached and exactly at what period fibrous tissue formation develops.

As to the diagnosis of these conditions, Dr. Hamer struck the keynote when he said in his paper that strictures of large caliber could not be diagnosed except with the bougie-a-boule. A No. 26 French and upward will admit a sound of one or two numbers higher, with no sensation of obstruction, but if we estimate this stricture of large caliber as 26 size, we can pass 25 or sometimes a 24 bougie-a-boule, and upon withdrawal through the velvety mucous membrane we find

slight obstruction to our finger tips; therefore, that exempts the sound as a diagnostic instrument. We cannot too strongly emphasize that.

As to the effects of stricture, they cannot be too strongly emphasized. Considerable damage may exist when it is not appreciable to the eye. It is the foundation stone of cystitis of various types. It is the keystone to the ascending inflammation, the pyelonephritis which we see following these simple infections, and it must be through the complications of stricture and infiltration. The writer cautions patients with stricture of small caliber against catching cold, exposure to drafts, to wet and dampness. I know of no more prevalent cause for retention of urine than an individual who comes back with a stricture of 15, or 10 or 12 French caliber, who becomes exposed to wet weather, to drafts across the pelvis, and followed in five or six hours with retention. But it is not the strictured tissue itself which causes this retention. It may seem illogical to you that that tissue which contracts as slowly as fibrous tissue contracts can close in five hours from a caliber of a goose-quill to zero. That must seem illogical to you. It is not the stricture which contracts but the retrostructural tissue behind the stricture towards the center of the body. That tissue has been under a burden for a long time. It has had the dilatation which the bladder has produced by its pressure to overcome the obstruction, and the stricture has caused more or less pouch formation in the immediate portion behind the stricture. Therefore, the mucous membrane becomes edematous, it engorges and forces its way into the center of the urethral caliber and shuts off the urine.

The changes in the stream are important from the standpoint of diagnosis, but there are many conditions which cause a disturbance of the stream of urine, so many nervous elements that enter, that it can only be used as a corroborative aid to our instruments of precision in making a diagnosis of stricture.

DR. W. S. EHRLICH, Evansville: Dr. Hamer has given us an excellent paper on the subject of stricture of the urethra in which he has covered practically everything I know about that subject; consequently my discussion will simply bring out a few points which particularly appeal to me.

I am very glad Dr. Hamer brought out one thing in connection with the etiology of stricture—a thing that probably is a superstition—namely, about strong injections causing stricture. I do not believe a strong injection will cause a stricture. I have seen some cases where patients have had gonorrhea probably a month or two and a diagnosis has been made of stricture. I do not believe that, knowing the pathology of stricture as we do. I do not believe a true organic stricture can be formed in that length of time.

With reference to stricture of the prostatic urethra, I have had several such cases, so-called, but I do not believe such a thing exists outside of traumatism. The cases I have seen—and they have been quite a few—have been thoroughly examined, and we found the stricture was simply an enlargement of the prostate gland itself, simply an engorgement of the prostate, inflammatory in character, which caused probably a narrowing of the lumen, but it was by no means a true stricture.

So far as the classification between large and small strictures goes, the classification which I was taught and use is that 15 French is the dividing line. I prefer Keyes' classification, and I consider any stricture less than 24 as a stricture of small caliber, and we should be on the lookout for strictures of that class.

Yesterday we had an excellent symposium on nephritis, showing the importance of early diagnosis in nephritis as in tuberculosis, and here I am going to ask for early diagnosis in stricture of the urethra. As we understand the pathology of stricture, a stricture first forms from the irritation and infiltration there, with a throwing out of fibroblasts which form connective tissue with secondary contraction. If we get these strictures at an early period, before secondary contraction occurs, I believe much can be done to cause the absorption of this infiltrate. I am rather skeptical whether a truly formed fibrous stricture is ever entirely absorbed and gotten rid of. I am so firm in this view that in every case I have treated, no matter how thoroughly I have been able to dilate the urethra, if he has had a fully formed fibrous stricture, I have advised that a sound be passed once every six months for the remainder of his life. I believe if we get these strictures early, in the so-called soft infiltration class, we can entirely absorb them or cause them to become absorbed.

The stream as an aid to diagnosis does not amount to much. There are many conditions that will give us a small stream, and so many conditions which will give us a forked stream, that very little dependence should be placed on the stream of urine. I believe the size of the meatus has much more to do with the stream than the stricture itself, unless the stricture be at or near the meatus. The stream of urine through a small meatus will be forcible, and there must be a considerable amount of stricture to cause the stream to become smaller in caliber than it would be normally; whereas a stream through a meatus that has been opened by a meatotomy will be less forcible. You take the force of the stream and the size of it, how many have awakened in the morning with a full bladder and on attempting to void urine find, instead of a free flow of urine, a very small stream, even though the bladder is full of urine. As Dr. Townsend has brought

out, there are many nervous and inflammatory conditions of the urethral wall which modify the stream of urine.

As to the discharge and its relation to the meatus, I have found some cases will have a discharge, no matter how much the urethra has been dilated, unless a meatotomy is done. I resorted to meatotomy in one or two cases in an experimental way; I have used the Kohlman dilator which would barely go through the meatus and have dilated it to a large size, and still the discharge has continued until a meatotomy was done, when the discharge ceased.

As to the pains in the back and feet from stricture of the urethra, I have not thought very much of them; I believe the pains these patients complain of are decidedly more from prostatic involvement than from the stricture itself. It is true, the prostatic involvement may be due to irritation from the stricture.

To go back to the stream of urine, I believe the changes in the stream are due more to diminished elasticity of the urethra than to any change that may take place in its wall, more especially the dribbling. There is not that power on the part of the urethra to contract and bring itself down to normal in the normal time.

There is one thing I have noticed, and rather pleasantly, and that is, in these cases of old strictures, especially where you get a stricture that suddenly becomes impassable, in which you resort to perineal section without a guide, with a bladder which is greatly dilated and has undergone the changes with which we are all familiar in strictures of that kind, the bladder very quickly recovers itself and its normal tone.

So far as pathologic changes in the urethra go, I believe there are fewer changes in the mucous membrane than we are led to believe or expect. It is my conception the changes that take place are changes in the tissues beneath the mucous membrane, and the mucous membrane itself has very little to do with any pathologic change.

DR. B. ERDMAN, Indianapolis: Dr. Hamer has presented a paper which, in the limited time at his disposal, seems to me to encompass a subject which is vast. He has given us a paper which one can read again and again. I will be frank enough to say, I had the opportunity of reading his paper, and it impressed me very favorably. There are three things, however, which I would like to bring before you, and which I would like Dr. Hamer to tell us about.

The first one is with reference to the meatus. I think we are taught the meatus is the smallest portion of the entire canal. It seems to me, that would have a considerable influence on the size of the stream and on the character of the stream. It is not at all uncommon in taking a bongie-a-boule and passing it through the meatus.

say 24 French, to find that the posterior boundary of the fossa is narrower than the meatus, showing that there has been some irritation set up there. I have often wondered whether or not this was not due to the introduction within the urethra of the nozzle of our late teacher's (Dr. Valentine) irrigation apparatus.

A second point is the character of the instrument used for examining the urethra. The old style nickel-plated bulbous bougie, or whatever character of metal was used, seems to have been practically entirely discarded by men who have had the opportunity of once using the soft bougie—a bougie with its acorn tip. It is an instrument of flexibility; it is an instrument which will convey to the fingers a much keener sensation of the character of the coarctation through which it passes than the old instrument, and it is an instrument with which you not only find the infiltrated areas of the urethra, but rough folds of the mucosa itself.

A third point I wish to speak of is the question of the frequency of urethral infiltrations at the peno-scrotal angle. I have had the opportunity to look over quite a number of records which I have, and I have found in more than 50 per cent. of the cases which I have examined that almost invariably they had some infiltration at the peno-scrotal angle. I have wondered what might be the cause of that. The tendency to have patients wear a comfortably fitting suspensory is one which might have something to do with it.

Another thing is the repeated carelessness with which the patient, who is not carefully instructed in the use of the syringe, injects the fluid up against the urethral mucous membrane at this angle, which may have something to do with it, and it is a point I would like to have the essayist speak of in closing the discussion.

DR. H. G. HAMER, Indianapolis (closing): In reference to Dr. Erdman's question as to the location of the infiltration at the peno-scrotal angle, I think his percentage of fifty is rather high. All observers agree that Sir Henry Thompson's statistics are nearly correct in placing at 60 to 70 per cent. of all strictures in the bulbous or bulbo-membranous portion of the urethra, 16 per cent. in the middle portion, and 17 per cent. in the anterior 2½ inches.

DR. ERDMAN: What I meant to say was, irrespective of the presence of infiltration anywhere else in the urethra, I have found this narrowing at the peno-scrotal angle.

DR. HAMER: It is found in a moderate number of cases.

I was delighted to have Dr. Townsend discuss my paper, because I feel I am indebted to him as my teacher for all I know about urothroscopy and urethral diagnosis.

TUBERCULOSIS OF THE ORGANS OF SPECIAL SENSE *

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The subject assigned me necessarily brings us to a consideration of forms of tuberculosis which are not ordinarily seen from day to day in the practice of medicine, therefore I shall ask you to pardon the frequent references to conditions which are declared rare. Nevertheless it is probably the usual thing for a patient dragging through the weary battle with a pulmonic tuberculosis to show some evidences of unusual complications and I take it that those who assigned the subjects had this very thing in mind when they charged me with the duty of presenting this paper. My remarks are purposely confined to the organs of sight, hearing and smelling.

In discussing ocular tuberculosis I shall not attempt any systematic arrangement and will choose lesions the average worker is more apt to encounter. The diagnosis of ocular tuberculosis is usually hard to make and my experience has been that it is not ordinarily made without recourse to various laboratory aids.

Tubercular involvement of ocular structures is now recognized as one of the most common causes of eye trouble. H. Laher in an article printed in Berlin last year declares this statement a fact but finds it to be secondary in a majority of cases. As to the value of recognizing such conditions I offer the opinion of Heine (Berlin, 1912) who thinks valuable information is to be obtained from specialist examination of eyes under the influence of tuberculin. He has published plates showing his ocular findings in twenty cases and claims the examination of eyes with special equipment affords a better oversight of the progress of the case than lung observations. Great difference in the prevalence of positive eye findings is noted in Germany.

Tubercular lesions of the conjunctiva are probably the most common of any form of this disease in the eye. Serehoff maintains it is much more common than generally supposed and believes the prognosis less serious than has been the prevailing opinion. He has found the ulcerative forms the most serious.

Tubercle of the conjunctiva is found either as a primary or secondary affection. The primary form is rare but there are frequent instances on record where it has been found without evidences of tuberculosis elsewhere and without reappearance locally or in other organs after its removal. Villard does not believe in its endogenous origin. Secondarily it usually appears in association with nasal and laryngeal disease.

* Read before the Vanderburg County Medical Society, April 14, 1914.

Several manifestations may appear as follows:

- (1) One or more miliary ulcers which may and usually do caseate.
- (2) Grayish or yellowish nodules closely resembling trachoma granules.
- (3) Hypertrophic papillae and outgrowths of granulation tissue.
- (4) Numerous pedunculated cock's comb excrescences.
- (5) Distinctly pediculated tumors.

The ulcers are uneven with slightly raised edges, the floors being yellow. The lids are thickened, the conjunctiva shows a dark-red swelling, the discharge is considerable. The preauricular and submaxillary glands are usually enlarged, the pain is not great unless the ulceration involves the bulbar conjunctiva and cornea.

In an eye presenting this picture one would naturally think of trachoma or syphilitic ulceration. Epithelioma might also suggest itself. However, in trachoma the lymph glands are not involved and most cases yield to copper sulphate if properly used. Copper has no effect on the tubercular process. Epithelioma is excluded by the age, tuberculosis generally occurring in persons under thirty years.

Microscopic examination of the excised portions of tissue and tuberculin tests will aid in the diagnosis. The demonstration of the bacillus requires very careful technic.

The prognosis must be carefully given for sight may be destroyed by involvement of the cornea.

Treatment consists of removing the diseased tissue by knife or curet. The galvanocautery has its advocates. Subsequently collyria of bichlorid, iodoform or aristol may be used. Verhoeff of Boston advocates the use of tuberculin. Armond and Eyre claim tuberculin is far superior to incision or curetting. The use of Roentgen rays has also been suggested.

Phlyctenular conjunctivitis, characterized by the appearance of one or more grayish elevations on the bulbar conjunctiva, less frequently on the tarsal portion, has long been associated with a strumous diathesis, if such a term is permissible in present-day nomenclature. Axenfeld disputes that it is a true tuberculosis but it is often seen in tubercular subjects. It may, therefore, be dismissed from consideration with the suggestion that it may be seen in the eyes of consumptives.

Phlyctenular keratitis is most frequently seen in scrofulous children and Derby has declared that 88 per cent. of the cases seen by him have reacted to tuberculin, which, of course, does not prove the tubercle bacillus to be the cause of the disease. Corneal phlyctennules have been known to follow subcutaneous injections of tuberculin and the Calmette reaction. The bacillus has not

been demonstrated in the lesion according to Müller.

A definite tuberculous ulcer of the cornea is described. It usually arises by reason of an extension of disease from the uveal tract. It is manifested either as nodules or diffuse interstitial keratitis. Tuberculosis causes about 10 per cent. of interstitial keratitis while inherited syphilis is the etiologic factor in nearly all the remainder of the cases. The lesion in the cornea not uncommonly has a distinct triangular form and may begin as a tubercular node in the periphery which later pushes its way into the center of the cornea.

Direct inspection renders the diagnosis of phlyctenular conjunctivitis or keratitis apparent. DeSchweinitz says the subjects should be treated as all other forms of tuberculosis in the matter of living, proper food, hygiene, etc. Argyrol 10 per cent., yellow oxid 1 per cent. are of service in treatment of the ulcers. Atropin to maintain mydriasis and cocain to allay photophobia. Tuberculin furnishes an efficacious treatment in those forms of keratitis due to tuberculosis.

Tubercular Iritis.—Iritis due to tuberculosis is said to occur usually between the ages of five and twenty-five. It may be, though not necessarily is, secondary to a process elsewhere in the body and I believe is most commonly seen in patients exhibited in clinics. Among local oculists it is not often seen. Dr. A. J. Knapp tells me that in more than twenty years of experience he has never seen a tubercular iris in his private patients. Dr. Bleeker Knapp after twelve years of private work has not seen a case outside the clinics. Dr. M. Ravdin and Dr. William Field after fourteen and fifteen years' experience in private practice, respectively, have each seen two cases which reacted to tuberculin. Even though it is rare we should be none the less able to recognize the condition.

The disease appears as a small, grayish, red or yellowish nodule developing at margin of pupil or its ciliary border and closely resembling what is described as disseminated miliary tubercle of the iris. The nodules are about 2 mm. in diameter and may be close to anterior surface of iris or deep in its stroma.

Two terminations have been described, either slow development and finally absorption and disappearance with posterior synechiae remaining at point of origin or successive development of new nodules leading to plastic inflammation of iris and ciliary body with corneal involvement, causing perforation at the corneoscleral junction and shrinking of the eyeball. In some cases the nodules are not well defined. In such instances they are situated within the inflamed iris.

The confluent or conglomerate form of tubercle of the iris occurs as a yellowish nodule growing from the periphery. This nodule may be covered

with smaller bodies. The tendency of the growth is to increase until perforation of the eye occurs, causing a general dissemination of tubercle.

One or both eyes may be affected although it is more commonly seen in but one. At the onset the patient may not present any other sign of tuberculosis but other evidences and fatal in form may result. Bacilli and giant cells may be discovered in the growths but oftentimes the diagnosis must await the inoculation of guinea-pigs or rabbits, or tuberculin tests.

Treatment has its limitations since removal of an iris tubercle is nearly always unsuccessful. Enucleation is recommended if any operative procedure is adopted. However, most authorities indict a thorough trial of tuberculin before resorting to enucleation. Von Hippel using tuberculin T. R. begins with a dose of 1/500 mg. and gradually increases up to 1/50 mg. Derby recommends the use of a bouillon filtrate.

In the treatment of ocular tuberculosis the vaccines and serums have many advocates. Bryan in the *British Medical Journal* of 1912 declares the results from vaccines to be good. This is especially true of lesions in the iris, where there is a free blood supply. In the fundus, where the blood supply as well as that of lymph is not so great, the treatment is less successful and has to be prolonged. The use of mydriatics when treating iris lesions has to be kept up and this tends to lessen blood supply and prolong treatment.

One of the latest observers advocating tuberculin is H. Laher, writing in the *Medizinische Klinik* of Berlin of May, 1913, who states that it is of exceeding value in conjunction with other measures. Fifteen of 50 patients treated with tuberculin by him were cured, 22 were improved while only 8 showed no benefit.

Episcleritis, scleritis and sclerokeratitis are all found in tubercular subjects but they cannot be considered as due to the specific organism under discussion.

TUBERCULOSIS OF THE EAR AND NOSE

Tuberculosis in the primary form in the nose is rarely seen. It is uncommon to find writers quibbling over the diagnosis. Ballenger gives over much of his space in his book to describing a primary case that he has seen and Wendell Phillips declares that Ballenger's own history and description prove the case to be one of lupus, due to an attenuated bacillus and chronic in form.

It is not uncommon to see consumptives well along in the course of pulmonary disease suffering with an otitis media and the surprising thing is that more middle ear or nasal tuberculosis is not seen when it is considered that the eustachian tube orifices are normally very prominent and in tubercular subjects are more patulous and

thus the organisms may be forced in great numbers into the nose and middle ear by the nearly always expulsive coughing of the average patient. Strauss, many years ago, demonstrated the frequent existence of tubercle bacillus in the nasal cavities of people associated with consumptives, his figures as given by Bonney being nine out of twenty-nine examined, while Dr. W. Noble Jones in 1900 obtained a positive reaction in 10.3 per cent. of cases of guinea-pigs inoculation with nasal secretions from well people.

Why is nasal and aural tuberculosis rare? The answer must be made up from several bases for argument and some of these may be soundly questioned. First the anatomic structure and physiological processes within the nose are to be taken into consideration, insofar as they furnish ground unsuited for growth of the organism. There is no less permeability of the nasal mucous membrane than of the larynx, hence differences in the susceptibility are to be looked for in the physiologic processes of the nose. The impenetrability of the mucosa is to be ascribed to the reflex excitability of the nasal membranes and the immediate outflow of defensive secretions. Many observers think the convoluted folds of the mucous membrane over the turbinates act as a filter to inspired air. The vibrissae at the nares serve as a barrier to foreign particles brought into the nose during breathing. The organisms are kept on the move by the cilia of the epithelium and are washed away from the upper areas of the nose by gravitating serums thus protecting the cribriform plate of the ethmoid. In addition to these factors in the matter of protection it is claimed the ciliated epithelial cells manufacture antibodies and the usual nasal secretions inhibit germ growth by a chemical means. As an argument against the chemical protection theory Bonney says that if such bactericidal properties existed to any considerable extent infection with the diplococcus meningitis and its passage by way of the cribriform plate might be less common.

Middle-ear tuberculosis will come to be more frequently recognized than it has been in the past. The realization of the fact that though pulmonary involvement is quiescent, a sudden discharge from the ear unaccompanied by great pain, the discharge soon becoming purulent and preceded by a slight fullness in the ear and some impairment of hearing means a tubercular middle ear will bring about a more thorough search for the causative agent.

It is not within the scope of this paper to consider tonsil and adenoid tuberculosis save to say that these structures are recognized as portals of

infection in nasal and aural disease as well as in other forms.

Tuberculosis of the nose may come under one of two classifications; the chronic or lupus and the acute process which is most commonly seen as secondary to lung lesions. We may accept that the bacillus gains entrance through inspired air and by way of the blood and lymph channels.

The more rare acute form does not invade bony structure and here we have a strong differential point from luetic disease. The ulceration begins as small granules the size of millet seed and is located on the anterior part of the septum or floor of the nose. The granules are separated by areas of healthy tissue, are grayish in color and irregular in outline. This stage passes so rapidly that but few observers have seen it. The organism is found in great numbers even in this early stage. Later the ulcer has undermined edges and is surrounded by an area of miliary tubercles. The disease may spread to the anterior nasal fossae and to the upper lip. A tuberculoma has been described which appears as a hyperplastic growth, reddish gray in color and the size of a hickory nut which attacks the inferior turbinated bones.

The diagnosis of the foregoing forms is based on the presence of advanced laryngeal or pulmonary disease and the demonstration of the bacillus in smears or cultures taken from the ulceration. The prognosis is unfavorable. Treatment consists in keeping the lesion clean, and the application of mild antiseptics.

Lupus of the nose is classified as nodular, vegetating, tumorous and ulcerating. All four forms are purely local in character, have a tendency to heal, cicatrize and recur. Lupus is said to be most common in males and usually occurs after the age of twenty.

Either of the forms has a predilection for the mucous membrane of the cartilaginous septum, floor of the nose and the anterior part of the inferior turbinals but never attacks bone itself. Perforations of the cartilage of the septum are common. The border of the opening is soft, fungoid and bleeds easily upon the slightest manipulation. A part of the edge may be thin and healed while the remainder is thick and ulcerated. The healing process may bring about deformities in the way of stenosis or the ala nasi may be destroyed, producing a death-mask appearance.

The disease should not be confused with any other process after a thorough examination clinically backed by laboratory aids. It is amenable to treatment but if neglected not only produces horrible deformities but may extend to the larynx

or lungs thus producing death. It is prone to recur, so much so that the patient is liable to lose heart and abandon treatment. No one form of treatment can be used as a routine. The x-ray used through a tube which may be applied to the interior of the nose is regarded by Fordyce as ideal. When this fails the galvanic cautery, dental burr, curet or arsenical paste may be resorted to. Locally Phillips recommends the application of iodine one part to two each of potassium iodid and distilled water after removal of the lesion surgically. The use of potassium iodid internally followed at once by the sprinkling of calomel on the lesion so as to liberate a nascent iodid of mercury is advised.

In connection with nasal tuberculosis it is said the post mortem 25 to 50 per cent. of cases dying of consumption show sinus involvement. In the living evidences of such spread of the disease is not frequently seen. Skillern of Philadelphia reported in 1912 a series of 100 experiments which proved to his satisfaction that the sinuses of consumptives are not diseased more often than those of well people.

Tuberculosis of the ear is seen as acute and chronic or lupus. The acute form occurring primarily in the ear is not frequent but is probably more so than formerly believed. The secondary acute form is usually concomitant to pulmonary disease, the most ordinary route of infection being by way of the eustachian tube, either by contiguity of the submucous tissue or through its lumen. Infection may also occur through perforations in the membrana tympani. In miliary disease the advance is through the blood stream.

Bezold, a master of statistics, found that 32.3 per cent. of all bilateral otitis-media cases seen by him were tubercular in origin. It is said that 65 per cent. of all discharging ears in childhood are due to the tubercle bacillus. These figures emphasize the need of watchful, scientific care in all childhood ear troubles.

The symptoms of middle ear tuberculosis are fairly characteristic. About the only promonitory complaint will be a sense of fullness in the ears with some loss of hearing. Often the first sign will be a discharge, unaccompanied by pain or if there is pain it is not nearly so great as that in other forms of middle-ear disease. Blake and Buck lay stress on infiltration and perforation in the posterior-superior quadrant of the drum membrane as being a sign of tubercular otitis media. Pearl-gray spots dotted over the drum are also considered as valuable aids to diagnosis. The process goes on to rapid destruction of the ossicles

and neighboring bone. The reaction in the tissues is said to be hard to demonstrate and the bacillus is hard to find in most cases. Bezold says the organism may be found in pure culture in an exudate coming from the region of the promontory.

Complete deafness is more apt to accompany this disease than most other forms of ear trouble. Children die of meningitis as a rule. The promontory, annular ring, fascial and carotid canals, mastoid and labyrinth may all be destroyed by necrosis. Dura and sigmoid sinus may be uncovered before patient complains of symptoms.

Diagnosis is suggested by the discharge occurring in a consumptive and its being attended by rapid destruction with the absence of pain. Large areas of denuded bone are suggestive. Inoculation of rabbits renders the diagnosis positive. Prognosis depends on the general process, death usually resulting from pulmonary lesion. Meningitis, brain abscess and sinus thrombosis are possible sequellae. Paralysis of seventh nerve is not infrequent. In infants tubercular mastoiditis is very dangerous.

Ordinary treatment consists of cleansing the canal and tympanic cavity by frequent douching and wiping away the debris for which lysol and normal salt solutions may be used.

Severe pain with profuse secretion and appearance of granulation tissue in the meatus and large areas of denuded bone indicate the presence of sequestra. These should be curetted regardless of the general disease if patient can possibly stand operation. When the aditus, antrum and mastoid become involved the radical mastoid operation presents only chance for eradication. This undertaking is dependent upon general condition of patient but it is advisable wherever the unfortunate has the resistance to combat the surgical shock. A goodly percentage of recoveries from the surgical work is the rule.

In connection with the treatment it is advisable to remove tonsils and adenoids whenever they are considered the source of trouble and the patient's condition will permit the operation, for following this procedure some prompt improvement has been noted in a majority of cases though some observers report rather less happy results. However, the majority of writers favor and advise operation, all other facts being equal.

Lupus of the auricle in various forms not unlike that appearing on the nose is a condition not very often seen. It is amenable to the same treatment outlined when we were discussing nasal lupus.

SPECIAL ARTICLE

THE DEDICATION OF THE ROBERT W. LONG HOSPITAL

The Robert W. Long Hospital of the Indiana University School of Medicine, Indianapolis, was formally dedicated on Monday, June 14, 1914.

The exercises consisted of a series of three events, beginning at 2:30 in the afternoon, when a large audience assembled at the State House in the House of Representatives and listened to addresses by Dr. Henry S. Pritchett of New York, president of the Carnegie Foundation for the advancement of teaching, and Dr. Chas. P. Emerson, dean, Indiana University School of Medicine. Governor Ralston presided at the meeting and the Indiana University Orchestra furnished the music. This meeting adjourned to the hospital building where the property was formally presented by Dr. and Mrs. Long, and accepted on the part of the state by Governor Ralston.

The next event was the alumni and university banquet at the Claypool Hotel at 7:30, which was largely attended, not only by alumni, but by many lay friends of the university.

Dr. J. N. Hurty was toastmaster and speeches were made by Dr. Pritchett, Dr. Bryan, president of the university, and Dr. Hoover, professor of medicine, Western Reserve, Cleveland, Ohio.

The day was a beautiful one and the whole series of events carried out on schedule and to the great satisfaction of those fortunate enough to attend them.

Great interest attaches to the address of Dr. Pritchett, because he is peculiarly qualified by reason of his observation and close study to discuss the subject he chose, "The Medical School and the State." He made no attempt to eulogize this particular school, or to discuss the local situation further than to say that he believed a correct start had been made to build a medical institution of merit and great value to the state.

Broadly speaking, his idea is that the chief function of a medical college maintained by the state is to conserve the health of the people of the state.

The medical college should be one of the big factors, classed with the State Board of Health, State Pathologic Laboratory, State Hospital, and other agencies related directly to the health of the people and under the control of the state. These units should work in harmony—the ultimate aim being a single one—conservation of the

health of all the people of the state. Broad but efficient and practical public service should be the key-note of the ideals which should prevail in the administration of a medical institution supported by the state.

Dr. Pritchett's address at the alumni banquet was a very logical sequel to the afternoon address. He discussed the question of why so little money had been given by men of means to medical education and the fields of thought in which doctors were particularly interested. This seemed all the more strange when it is considered that physicians are often in a favorable position to use their influence in the disposition of wealth. The real reason, he thought, was that medical colleges formerly were viewed as mere commercial propositions, related only to the public as a means of setting up their students in a lucrative and profitable business. Naturally the man of means was not interested in such an institution. But now that the great possibilities of public service are being understood and appreciated, money has begun to flow, and will continue to flow in increasing quantities to such institutions.

That Dean Emerson entertains similar views of the chief function of a medical college developed during the course of his remarks at the afternoon session on "An Outline of the Work of the Robert W. Long Hospital." He said, among other things, that it would be the aim of the institution to study the social, economic and hereditary history of patients admitted for treatment so that such related knowledge might be available in solving some of the problems that arise in working out an efficient health conservation program. The already well-organized and able Social Service Department of the university would be the avenue through which these aims could be accomplished.

Any account of the exercises which omitted a description of the hospital would be incomplete. The building, as it stands completed and ready for patients, given by Dr. and Mrs. Long to the state, is a gift without any strings attached to it, and is a model in hospital architecture in America to-day. To those who saw it for the first time on the day of the dedication, its completeness came as a distinct revelation. The first impression of the visitor is that the architect and those responsible for the furnishings have made a major effort and a very successful one to make the place attractive. Even the critic whose sense of color harmony has been highly developed could find no fault with the furnishing of the private rooms.

While the attempt to make the hospital appeal to one's sense of beauty and comfort has been

extraordinarily successful, this has not been done at the sacrifice of a single detail necessary in the scientific care of patients. That this is true the following description of the hospital, abstracted from an article appearing in *The Modern Hospital* amply demonstrates.

"The hospital is a four-story building of gray mat-faced brick and steel construction, with Bedford stone trimmings and with floors of reinforced concrete. The main portion, four stories high, measures 75 by 48 feet, the ell 40 by 26 feet, and the two wings, of three stories each, 76 by 36 feet.

"The hospital is planned for the care of adult medical and surgical cases. The present intention is to devote the second floor to men and the third floor to women patients. Its normal capacity is 106 beds, 18 of which are in private rooms on the first floor, and 88 in the public wards on the second and third floors. On the fourth floor of the main portion of the building are the operating rooms, while over the ells are two roof gardens. In the basement are the kitchen, dining-room for doctors, nurses, and help, the laundry and the boiler rooms. The building is heated by steam. The arrangements for natural ventilation are supplemented by forced ventilation, one large fan blowing washed and heated (or cooled) air into the rooms, and three fans drawing out the bad air—one from the wards, one from the kitchens, and one from the service rooms.

"On the first floor are the rooms for the private patients and the offices of the executive staff of the hospital. The only point of medical interest on this floor is the central reception-room, which, when the east and west doors are closed, as they should be during the day, does not allow visitors access to or sight of the corridors or the private rooms. The second and third floors are almost identical in arrangement. Each of these floors is not only a perfect hospital, but each also can be conducted as three isolated units. The efficiency of a hospital demands that each floor be a complete hospital in itself—that is, that for the care and comfort of the patient it should not be necessary for him, or for the doctor or nurse in his behalf, to leave that floor. If, for example, the laboratory is a part of the ward, the doctor and his students will in the course of the day make more clinical examinations than if they must go to a separate laboratory building or even to another floor. Separate laboratory buildings are very desirable for research workers, and for the ward workers in case they desire to make special examinations: but the daily routine of the ward work, with its routine of laboratory exam-

inations, is another matter, and, that this may not be sacrificed to research, we have placed a laboratory on each floor. For the same reason there is on each floor a special hydrotherapeutic room, in which all the common and simple forms of baths may be given; for certainly, if neither nurse nor patient must leave the ward each time a bath is prescribed, more baths will actually be given daily than would be the case were there a separate bathhouse. Each large ward has its own balcony for bed patients. The roof gardens are intended primarily for convalescent patients.

"Forty-four beds were accepted as the floor unit of this hospital. The reason for this figure is that, on the one hand, there should be as many

nurse with maids can give personal attention to about that number. In America, however, our nursing is not done by graduates, nor do ward maids play a conspicuous part in the hospital work. Here the actual nursing is done by inexperienced undergraduate nurses, who are "learning how," and who are sent to another ward as soon as they are efficient in one. These pupils must be under constant supervision, not only for the patients' sake, but in order that they may learn well the art of nursing. It would, therefore, be an accident were our ward unit the same as that of Germany, and indeed experience has shown that for our problem between forty and fifty patients is a better ward unit.



THE ROBERT W. LONG HOSPITAL
Indiana University School of Medicine

patients on each floor as is consistent with their comfort and safety, since the same space for administration and equipment will serve sixty patients as easily as ten, while, on the other hand, the upper limit of the number of patients on one floor is the maximum number of patients for whose care, by her pupils, one graduate nurse can be responsible. Supervising nurses in hospitals with a ward unit of twenty-eight or under complain that the work on one floor cannot keep them busy, and they object to the care of more than one floor. In Europe the nursing is done largely by graduate nurses who, for the most part, are permanent residents of the hospital; and the reason for the unit of European hospital floors, about twenty-six, was probably that one graduate

"One of the most important points in hospital architecture is to save the nursing force as many miles of walking per day as possible and to avoid stone floors wherever possible, for the more fatigued the nurse the poorer her work. The sore feet of the nurse is a problem to be considered seriously if efficiency of nursing is our aim. Good nursing consists not merely in doing all that is actually necessary for the patients, but in doing for them, in addition, much more than is necessary; good nursing consists in carrying out all the doctors' orders and also in making the patients just as comfortable and happy as possible. The more tired the nurse and the sorer her feet, the fewer of these little extra attentions will the patients receive. For this reason the dis-

tances from the service rooms and the diet kitchen to the farthest patients should be as short as possible, and the floors should be covered (in wards for adults) by an elastic material. Large wards are usually long wards, since the width of a ward is a nearly constant quantity. Wards with twenty-four beds are too long. We have attempted to arrange forty-four beds in semi-circles around two administrative centers, and believe that we have reduced considerably the total distance to be walked by the nurses.

"In the large wards the concrete floor is covered on the sides with wood and in the center with a wide strip of linoleum. The forty-four patients on each public floor are grouped in two large wards, with sixteen beds each, and four small rooms arranged in pairs, separated by the north and south corridor, each pair to contain from three to six patients. The larger rooms will contain easily four beds and the smaller rooms two beds. Each group of one large and two small rooms for twenty-two patients has as its center a service room. The diet kitchen, common to both groups, is between the two. From the intersection of the two corridors the nurse can command a view of a surprising number of all forty-four beds.

"In order to deaden sounds, the walls of the small wards are made of two layers of hollow tiles, separated by a mattress of seaweed. In these rooms noisy patients or those with disagreeable conditions may be isolated, or patients with similar diseases grouped. Each floor has its door from the elevator, into which each new patient is first taken. Here he is given a complete bath and receives his ward clothes. Here many minor surgical operations may be performed, fractured bones set, etc. To this room he could be brought for dressings.

"The elevator, the admission room, and the laboratory are grouped at one end of the north corridor, and are separated from the wards by thick swinging doors, which are intended to deaden the sounds from these, the chief centers of noise in most hospitals.

"The lighting of the wards is by chandeliers with opaque reflectors, which throw all the light to the ceiling. In one large ward we also have used floor lights as an experiment, hoping that the nurse can obtain an even light in the ward without awakening the patients, each of whom will be shaded from this light by his bed. Behind each bed is a signal light, which gives a red signal when the patient presses the button of his bed cord to call the nurse. In addition there are emergency buttons at convenient points on the

walls. When these are pressed a green light shines at several points throughout the floor and a buzzer in the diet kitchen rings the alarm. This is to be used by a nurse who sees that she must have at once the assistance of other nurses.

"The surgical rooms are on the fourth floor. In order that the convalescent patients may reach the roof gardens on the floor without going through the surgery, outside balconies were built connecting the ell with these roof gardens. The surgery consists of two large operating-rooms, with north light. Each operating-room has its own anesthetizing-room, and between them, equally distant from both, is the sterilization-room, where the instruments and supplies are always ready. On this floor is also the dark-room for examinations requiring artificial illumination.

"Since this one building must be a complete hospital, there are in the basement the boiler-room, the ventilating apparatus, the laundry, the kitchen and the dining-rooms for the staff, nurses and help. On this floor are also the large store-rooms for the hospital. The hospital faces south, and is placed in the center of the east end of a lot of sixteen acres. It is hoped that some day there will be a new medical school building and new hospital units to complete the medical group."

On the one hand Dr. and Mrs. Long are to be congratulated that their plans have been brought to such a successful fruition, and on the other, the people of Indiana that they have been the recipients of such a magnificent and useful gift.

JOHN D. ROCKEFELLER has just donated \$2,500,000 to the Rockefeller Institute for Medical Research to purchase additional land in New York City adjoining the present plant, and to erect, equip and maintain additional laboratories. This is in addition to a fund of \$1,000,000 for the establishment of a department of animal pathology. Mr. Rockefeller's previous gifts to the institution had amounted to nearly \$9,000,000, exclusive of the real estate in New York City, and the endowment of the institute will now reach about \$12,500,000, making it the most amply endowed institution for medical research in the world. Much has already been accomplished in the interest of medical science and for the benefit of humanity by the Rockefeller Institute, and much more will be accomplished in the future under the beneficent patronage of Mr. Rockefeller who seems to withhold no funds that are necessary for carrying on to the fullest extent the aims and objects of the Institute.

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EDITORIALS

**THE HOSPITAL'S RESPONSIBILITY
IN THE PRACTICE OF FEE-
SPLITTING**

The practice of fee-splitting has been quite fully discussed by the medical and lay press. The giving and receiving of commissions has been almost unanimously condemned. The few exceptions are those who profit by it, and very few of these have had the temerity to defend it openly. The practice is dishonest and no thinking person need be misguided. It should be abolished. The undivided effort of the best of the medical profession is directed to this end.

Have we not the right to expect the cooperation of all forces for good? The trustees of hospitals and the religious sects which own and conduct the majority of these have an obligation they cannot escape. If they admit to their staffs men who resort to fee-splitting and delude and fleece their patients, the hospitals will be morally responsible. Have they the right to countenance men given to dishonest practices? Would they allow abortionists to use their institutions to further their practice? Would they extend their privileges to the quacks who deceive and rob their victims? Certainly they would not, for public sentiment would soon drive them out of existence.

These hospitals now generally admit doctors who are notorious "fee-splitters." Why do they not stop it? They cannot enter a plea of ignorance for it is their duty to know the moral and ethical standing of all physicians who bring patients to them. Suppose, for example, a physician was known to be dishonest, that he performed unnecessary operations for a fee, that his only object was revenue and he treated these patients only with the idea of their money production, yet the hospital allowed this practice to go on and, by silence, was accessory to the crime, would it not be equally guilty?

Can the hospital authorities simply say they do not know? Surely an enlightened public will demand that they inform themselves.

The unfortunate patient who goes to a hospital and is there defrauded and mistreated by a fee-splitting doctor, will hold the hospital in a measure responsible. In the great crusade against fee-splitting we have a right to expect earnest, intelligent and efficient help of the hospital authorities and all moral, charitable and religious forces back of them. If all hospitals would withhold the use of their wards to fee-splitting doctors, the practice would soon be broken up.

EDWIN WALKER.

SURGERY AND TUBERCULOSIS

The changing attitude of the profession towards the treatment of the different forms of tuberculosis, as exemplified in the literature of the last few years, forms an interesting study in contrasts. Pulmonary tuberculosis has been in danger of becoming a purely surgical disorder while operative procedures have become unpopular in the treatment of "surgical tuberculosis."

Thanks chiefly to Brower, the nitrogen gas collapse therapy of Forlanini has been rescued from obscurity. Having gained a foothold in the treatment of phthisis, surgery proceeded to enlarge its sphere and multiply its procedures. We now collapse the lung with an extra-pleural graft of adipose tissue (Tuffier) or a plug of paraffin. We mobilize the chest wall by the resection of ribs. We can take our choice between the localized resection of a few ribs over the involved area (Quincke-Bier), the removal of one-half to two-thirds of one side of the bony thorax wall (Brauer-L. Spangler-Friedrich), and the removal of 2 or 4 cm. out of each rib, at the angle, from the first to the ninth (Wilms-Kolb). Sauerbruch has advised resecting the phrenic nerve to bring rest to the diseased lung by paralyzing the diaphragm. We have the sanction of eminent authorities for ligating branches of the pulmonary vessels (Bruns-Sauerbruch-Tiegel) and for injecting an iodoform-glycerin emulsion into the diseased focus (Gessner).

The wave of conservatism which has engulfed the surgical treatment of tuberculosis of bones and joints is due largely to the cures obtained by Calot at Berck-sur-Mer and by Rollier at Lysin. The French and Italians claim that sea air contains some specific curative properties for surgical tuberculosis. Two years ago, while in France, I found that they have at least nineteen sea-shore hospitals for indigent children. Rollier's results with sun baths at high altitudes have astonished all who have investigated his work. Payr, von

Eiselsberg, Hochenegg and Bardenheuer are among those who have commented upon the results obtained at Lysin. Rollier's recent publications seem to substantiate his former claim that the healing of surgical tuberculosis in all stages, in all its forms, and at every age is possible with heliotherapy. The treatment starts with five-minute exposures of the feet, and it is gradually extended until the entire body is exposed to the sun daily for six to eight hours. Hageman of Marburg is obtaining good results by exposing the patients to the rays of the quartz lamp. The literature is filled with favorable reports obtained from Röntgen therapy with the technique of Wilms and Iselin.

Just what will be the future relationship between Surgery and Tuberculosis? From my own limited experience, a study of the literature, and some observations in a post-mortem room where surgically treated cases of phthisis were brought for section I feel safe in predicting that surgery will occupy a very limited sphere in the treatment of pulmonary tuberculosis. On the other hand, there will continue to be a field for the operative treatment of tuberculosis of bones and joints. DeQueverain, writing in the *Semain Medicale*, summed up the question in the words: "The surgical treatment of tuberculosis of bones and joints is not completely replaced by sun and Röntgen therapy. The nucleus of the treatment is to individualize according to the type and the location. Tuberculosis of long bones, of the scapula and pelvis, when easy to reach should be operated upon, except in children and the presence of multiple foci."

H. O. Bruggeman.

MEDICAL EDUCATION BY THE STATE

Some views expressed on the subject of medical education by speakers at the dedication of the Robert W. Long Hospital at Indianapolis, on June 15, 1914, are worthy of comment:

It is well that the physicians of Indiana give some thought to what it really means for the state to undertake the education of students in medicine.

Without spirit of criticism toward the old order, it is, nevertheless, true that the proprietary schools which furnished medical education before the state undertook the task aimed at the production of bread-and-butter physicians, or, in other words, good practical doctors. The highest aim of the best of these institutions was to graduate successful practitioners of medicine, and most

of us received our medical education in institutions inspired by such motives.

However able or conscientious the instructors in these institutions may have been, and they were often both able and conscientious, the system under which they were working compelled them to take a narrow view of the ultimate aim of medical instruction.

It is unnecessary to dwell on what happened in this state, as elsewhere, under such a system. Fierce and bitter competition among many schools, a wild, disgraceful scramble for students, and a considerable per cent. of the very large number of graduates, poorly and inadequately prepared for practice.

Indiana is just now reaping the harvest of this system in the quacks and charlatans found in every city of the state, and many of them with degrees from some of the medical colleges formerly in existence in Indiana.

The ideals of a medical institution under the control of the state and supported by it must, of necessity, be of much broader scope than those of the old order. The state will, and has a right to expect something more than a body of good practicing physicians as the total end-result of its generosity.

The problems of public health and sanitation, in which the whole people are vitally interested, are legitimate problems for the State Medical School to help solve. Medical research finds some of its most golden rewards in the solution of these problems, and the college should be a center for such research.

As an illustration, the state is annually spending thousands of dollars in what will probably prove to be a totally useless method to stamp out tuberculosis, and all because the biology and life history of acid-fast bacilli are not well understood, so that it becomes the function of a state medical school to add a little at least to the sum total of our knowledge of this disease.

A campaign of cancer prophylaxis is on, and there are a lot of unanswered questions which the people have a right to expect their medical college to help answer. The idea of public service must be kept prominently in view if a state medical institution is to fulfil all of its functions.

If this be the correct view it follows that the medical department of the State University is deserving of the most loyal support of the physicians of Indiana, as well as of all of its citizens, for it aims to be of direct practical benefit to all.

EDITORIAL NOTES

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE so-called Chiropractor College of Fort Wayne recently has placarded the mercantile houses, barber shops and saloons of Fort Wayne with an announcement concerning commencement exercises and an invitation to everyone to be present. From reliable sources we learn that the course of instruction consists of a very few talks and that the principal end in view was the receipt of fees for the instruction and still more fees for the diploma. These "doctors" are now permitted to impose on the general public without let or hindrance to their heart's content.

ACROSS the street from the office of THE JOURNAL is a glaring sign of a "mechano therapist" who announces that he is prepared to cure disease in any form. Quite recently the sign was taken down and the word "Chiropractic" was added. Presumably this latter move was with a view to catching those who are taking up with every new fad and fancy which offers hope to the suffering. We rather admire the spirit of the man who can add new features to his practice in order to keep abreast of the times in the demand for change. Of course it is really not necessary to know anything about the new pseudomedical eults (there isn't much to them anyway), so why shouldn't a man play the game for all there is in it?

THE supreme court of Kansas has upheld the popular repugnance and the professional condemnation of division of fees between the family physician and the surgical expert. The court holds that the secret division of fees is against public interest and safety, since it creates a strong temptation to select the surgeon who pays best for cases. Incidentally, it has been discovered that there are only a few upholders of the fee-splitting, though the practice prevails to an alarming extent and is concealed from the patient who pays two charges when only one is avowed. Commenting on the division of fees, the *New York Times* says that the remedy is to educate the public into recognizing the value of the services.

At the Atlantic City session of the American Medical Association the cancer problem received the usual amount of consideration. The essence

of papers and discussions was as follows: Science has not yet found the cause of cancer. It is not known how it is contracted or how it is transmitted from one person to another. We do not know how to prevent it; some day we will know. Meanwhile, cancer is increasing rapidly. The best advice and the only advice that can be given to the public with our present knowledge is to have every suspicious sore or lump removed and removed early. Thousands of lives now needlessly sacrificed could be saved if the average cancer patient would go to a surgeon as promptly as does the average appendicitis patient. Delay in the treatment of cancer is dangerous.

It is quite a fad among certain more or less prominent members of the medical profession to have their pictures, their honors, and their doings put in the public press. Presumably these men believe that such newspaper publicity is a good way to advertise without incurring the displeasure of their professional brethren. It may not be amiss to remind such erring brothers that their habits are not only nauseating to the better class of medical men, but are frowned on by the better class members of the laity. We seriously question whether newspaper prominence of the kind under consideration brings any returns of any kind whatsoever. We do know that the act is a breach of ordinary decency and propriety, and in not a few instances works as a positive injury to the one who hopes to profit.

JOHN A. PATTEN, one of the most prominent laymen in the Methodist Episcopal Church organization, has that peculiar type of conscience possessed by some erstwhile church members that can be twisted in such a way as to permit him to engage in many shady transactions, ostensibly without a knowledge of doing wrong. The Council on Pharmacy and Chemistry has, however, furnished evidence to the effect that the nostrum known as "Wine of Cardui," made and sold by the Chattanooga Medicine Company, of which John A. Patten is a large owner, is nothing more or less than a patent medicine which is taken largely for its alcoholic effect. Inasmuch as not one of the official publications of the Methodist Episcopal Church will carry advertisements of "Wine of Cardui," because the business is too dirty, too vicious, and too fraudulent for their pages, the query is offered by the *Journal of the American Medical Association*, "Why does that church bestow on a man who makes his money through such a business some of its highest honors and dignities?"

IN answering a query concerning the proper distinction between the terms "tuberculous" and "tubercular" the *Jour. A. M. A.* says: "Careful writers apply the term 'tubercular' to lesions characterized by the presence of nodes or tubercles, whether caused by the tubercle bacillus or by any other agent; and 'tuberculous' to lesions produced by the *Bacillus tuberculosis* or to conditions associated in one degree or another with tuberculosis. That is to say, the word 'tubercular' applies to the external form of a lesion; the word 'tuberculous' to the cause, actual or possible, of a lesion or a condition. Thus, tubercular leprosy, caused by the *Bacillus leprae*, is so called because of the nodular character of the lesions, while tuberculous pleurisy is so called because produced by the tubercle bacillus. A 'tuberculous diathesis' is a predisposition toward tuberculosis; the tubercle bacillus, whether capable of being demonstrated or not, is regarded as a factor, potential or operative, in the condition."

A FEW weeks ago one of our readers called attention to the fact that we had included the name of an advertising doctor among personals. That we are not the only ones caught occasionally is evidenced by the fact that *The Journal of the A. M. A.*, in a recent issue has made a personal item of the announcement that one Dr. H. O. Wells of Fort Wayne has been made president of the Blue Cast Mineral Springs Sanitarium. The man given this prominence is a well-known advertiser who uses a good deal of printer's ink in informing the public concerning his phenomenal skill and the magical cures performed by him. Quite recently he published a letter from one of his dupes recounting remarkable results from treatment, and in a later issue of the same newspaper the dupe came back with a letter in which he stated that he had not authorized the publication of his testimonial, and, that, furthermore, he had not been benefited by treatment.

WE have been raising the standard of requirements for the practice of medicine according to the methods in vogue with the regular medical profession, and at the present time it is a rather difficult matter for a man to meet the exactions. To have a high-school diploma, two years of college work, four and sometimes five years of medical training, and then to be required to pass a stiff examination by a board of medical registration and examination is making it rather discouraging for the young man who has a longing to be legally qualified to attend the sick and suffering. It is no wonder that a short cut to the ultimate end is taken by embracing the teachings

of various pseudomedical cults that require but a few months and sometimes but a few weeks in order to turn out full-fledged doctors who are privileged to take care of the sick and suffering as long as no drugs are prescribed. No question is raised as to whether a knowledge of anatomy, physiology or pathology is possessed, for such a little thing as a standard of requirements is not taken into consideration. Eventually the pendulum must swing in the other direction, but for the present the condition of affairs is not very flattering to our sense of good judgment.

THE American Medical Association honored itself when it presented a gold medal to Surgeon-General Gorgas in appreciation of the services and the genius which made possible the construction of the Panama Canal. In presenting the medal, President Witherspoon said: "General Gorgas, one of the acts of my administration of which I am very proud, was the appointment of this special committee for the purpose of showing to the world our appreciation of ability, our appreciation of greatness, our appreciation of that wonderful genius which has made it possible, sir, for you not only to demonstrate to the world that it was possible to build the Panama Canal, but also to go further and show, as you have done, that 500,000 lives which have been lost in our country by preventable diseases can be and will be prevented finally with you at the head of the Army of our country. We hope you will always be at the head of the sanitary protection of our people. As retiring President of the American Medical Association, it gives me great pleasure to turn over and to present to you, General Gorgas, a gold medal in commemoration of your wonderful ability and your wonderful work that has connected nations and has taught the world that the American Medical Association contains a man who dared to do what was right for the salvation of mankind."

IT is a common thing for lawyers to receive large fees, and seldom if ever do courts or juries refuse to return a verdict in favor of any attorney who has attempted to collect a large fee through legal action. On the other hand, it is a well-known fact that doctors usually suffer defeat if they attempt to collect large fees for services rendered, even though it can be definitely proved with reasonable certainty that as a result of the services a life has been saved. In view of this it is refreshing to learn that a Chicago surgeon has been awarded a judgment of \$50 in excess of the \$5,000 fee charged for an

operation. In all probability for at least once the attorneys were unable to find jealous doctors willing to go on the stand and testify that the services were not worth the amount charged. It has been demonstrated time and again that when a doctor fails to secure anything more than average compensation for his services, another doctor usually is responsible for the inability to make the collection. It seems strange that doctors as a class fail to recognize the fact that what is good for one is good for all, and, on the contrary, when any physician fails to secure ordinary or more than ordinary compensation for services rendered, it works to the detriment of the profession in the community where the incident occurred.

As evidence of how some of the independent medical journals pad their advertising department and create an appearance of prosperity, which perhaps is counted as an asset in securing other advertising, we desire to mention the fact that not a few so-called independent medical journals are carrying the advertising of the Physicians' Defense Company of Fort Wayne, when as a matter of fact that concern went out of business over six months ago and paid all of its obligations before doing so. The same independent medical journals are carrying no inconsiderable amount of advertising for which they will receive no pay of any kind whatsoever. We know, from bitter experience in some instances and as a result of investigation in other instances, that certain firms that are very easy to secure as advertisers are notorious dead-beats, and no one can extract a dollar from them without having a derrick to do it with, and the medical editor is the last man on earth that would be able to secure compensation for services rendered. This padding of advertising pages is on a par with the padding of the circulation, for it is a well-known fact that a large proportion of the independent medical journals have about one-tenth the circulation that is claimed, and we wonder how long the really desirable advertisers are going to stand for such imposition.

BEWARE of collecting agencies, and if you are disposed to place your accounts with anyone for collection, be sure you know that your confidence has not been misplaced. We feel disposed to utter this warning for the reason that at the present time there are some three or four collecting agencies soliciting business in Indiana, and through personal experience we know that practically all of them are not prepared to give

adequate return for the accounts that are placed with them. The average doctor can collect his own accounts if he will make an effort to do so. The trouble is, many doctors are afraid they are going to offend someone if they send out statements, and in the end they hurt themselves more than they hurt anyone else. In this day and age it is absolutely necessary that business methods shall be employed in the practice of any profession, and every doctor should send statements the first of every month and make an effort to collect what is due at an early date. The longer an account stands the harder it is to collect and the greater the chance of creating offense by trying to make the collection. Aside from all this, the physician who expects and demands reasonable compensation for his services, and prompt payment of all bills, is the one who not only makes the greatest success in every way from the practice of his profession, but who commands the greatest respect and the largest number of friends. Such a doctor has little use for a collecting agency.

THE next session of the American Medical Association is to be held in San Francisco. There is a peculiar appropriateness, says the *Jour. A. M. A.*, in meeting next year in connection with the great exposition which is to celebrate the completion of the Panama Canal. The decisive factor which made the construction of the Panama Canal possible was the control and practical extermination of infectious diseases. This was accomplished through the efforts of the Army and Navy Medical Services and the United States Public Health Service, which furnished trained men for work in the Canal Zone who were able to apply our knowledge of preventable diseases in a practical way and to render the tropical jungle a more healthful place in which to labor than any of our large American cities. The canal has not merely been completed; it has been completed with a smaller toll of lives than would probably have been exacted from any similar undertaking within our own boundaries, but under different sanitary supervision. Therefore, when the American Medical Association meets in San Francisco it can, with perfect truth, say to the country and to the world, "We have a right to meet at this time and this place because we represent the profession which made possible the construction of the canal which this exposition commemorates." The San Francisco Exposition will be a celebration of the most striking achievement of scientific medicine quite as much as the recognition of the successful completion of the greatest engineering undertaking ever conceived.

CONCERNING the question of the various forms of advertising practiced by physicians and the freedom with which we criticise doctors in small towns when they permit newspapers to publish accounts of successful treatments or operations, we are reminded by some late metropolitan newspapers that it is not always the doctor in the small town who is most guilty of a breach of ethics or good taste in permitting his name to appear in the public press in a manner which clearly indicates that he desires to exploit himself. When some of the leaders in the profession, men who have established reputations and have been highly honored by their confrères, are willing to permit interviews, in which they exploit themselves, to be published in leading metropolitan newspapers and magazines, we have no right to criticise the doctor in the small town who permits his name to be coupled with the successful recovery of one of his patients, due to a successful appendectomy. It is quite true that the well-known and popular physician is very apt to see his name in the paper without his knowledge or consent, but when his name appears there in connection with an interview with a reporter, it is a safe bet that he courted and sanctioned the publicity. This reminds us that there are some great men in the medical profession naturally modest in their actions and tastes, whose names are never seen in the lay newspapers and magazines, whereas other men of smaller caliber in every way are known to the public through lay press notices which are nothing short of personal advertisements. To use an advertiser's expression, "there's a reason."

DURING the year 1913 there were only three cases of typhoid fever among the 90,000 United States soldiers doing service in the United States and its possessions. Two of these were new recruits who developed the disease four or five days after they enlisted. Only a single case of typhoid fever in an inoculated soldier occurred during the entire year out of the entire body of 90,000 men. This case occurred in a soldier in the battalion on duty in China. All three cases recovered, so that not a single death in the army resulted from this disease. When it is remembered that typhoid has been for centuries the most dangerous disease to the soldiers, and that every army, whether on garrison duty or in the field, has expected to pay heavy toll of sickness and death to this disease, the record of our troops is all the more remarkable. The disappearance of typhoid is due directly to typhoid vaccination,

which has been practiced in the army since 1909. Previous to the introduction of vaccination the best record which had been obtained by sanitary precautions was in 1908, in which, out of 74,692 men, there were 239 cases of typhoid with 24 deaths. As the sanitary conditions, food, water and all the surroundings were practically the same in 1913 as in 1908, the only cause for such a remarkable record for 1913 is the general enforcement of typhoid vaccination. The statistics concerning typhoid before and after the adoption of typhoid vaccination in the army is given in an article by Major F. F. Russell in a recent issue of *The Journal of the American Medical Association*.

At the recent session of the American Medical Association, held at Atlantic City, the Judicial Council recommended to the House of Delegates the following resolution:

Resolved, That it is the sense of the House of Delegates of the American Medical Association that each county society should constitute a publicity committee whose duties shall be to give to the daily press accurate information on all medical matters of interest to the public, that this shall be freely given without the mentioning of names or from whence the information comes, and that this committee shall further act in an advisory capacity to all physicians of its society in questions relating to publications other than in the medical press. Be it further

Resolved, That the secretary of the American Medical Association be instructed to forward this resolution, with the reasons calling it forth, to the secretary of each constituent state association, with the request that it be transmitted to each component society of that constituent association.

With the adoption of this resolution it is intended that a means will be provided whereby, without mentioning any names and without exploitation of any individual, the daily press can obtain accurate knowledge of all matters in medicine it desires to publish. On the other hand, this plan permits the public to obtain, through the daily press, accurate information on medical matters that are of interest to it, and the names of the individuals giving the opinion remain unpublished. It is evident that the plan, if followed, would be fair and just to the public, the press and the profession, though we are in doubt as to the fidelity with which the plan would be followed by those members of the medical profession who court newspaper publicity. It is a very easy thing to get around a rule or a law, and we regret to say that there are certain members of the medical profession who are so desirous of

being "in the lime light" that they would find a ready means of circumventing any such regulation as is proposed.

At the Atlantic City session of the American Medical Association, Chicago delegates, most of whom are known disturbers in the field of ethical medicine, were responsible for the introduction in the House of Delegates of a resolution deploring the organization of the American College of Surgeons. The promptness and unanimity of action which brought about the tabling of this resolution indicated the temper of the representatives from every part of the country. Not content with this rebuff, the same crowd of Chicago delegates introduced a set of resolutions which endorsed the College of Surgeons and referred to that organization as affording not only the only means of acquainting the public as to who are competent to practice surgery, but that it is recognized as filling a long-felt want and should be heartily commended and endorsed. These resolutions likewise were tabled promptly, and it is very evident that such child's play created a feeling of disgust in the minds of the majority of the delegates present. There is an old saying that if you give a calf enough rope he will hang himself, and the saying is befitting the situation in Chicago, where a few disturbers have, through undue influence and political chicanery, secured control of not only the Chicago Medical Society, but the Illinois State Medical Association and its journal. As an evidence of the attitude assumed by these disturbers, who, for the time being are in power, one only has to look through the *Illinois Medical Journal*, which, from the advertising department with its objectionable advertising, to the editorial and correspondence departments, teeming with attacks on reputable individuals and organizations, to realize why those who are in control of medical affairs in Chicago are in bad repute from one end of the country to the other. But, as we have said before, there is a day of reckoning and we shall be very greatly surprised if those who are now disgracing the Illinois State Medical Association and the Chicago Medical Society are not given a severe rebuke at the next election. The rank and file of the medical profession of Chicago will not follow for long the kind of leaders who are now in power, and it is a safe bet that the Illinois doctors outside of Chicago are patiently waiting for a chance to change the administration, as they are now thoroughly acquainted with the bunch of Chicago disturbers whose specious arguments and petty grievances were given undue importance.

WHEN Taking a New Patient.—Look at your delinquent list for his name; if he is a dead-beat, don't let him owe you.

Always get the name fully, the home and business address, the occupation, and by whom employed; some day you will find this useful, and any way it enables you to get an idea of the financial status.

If he is a minor, get this information concerning the party who is responsible.

If he insists on a promise to cure, don't take him; he will not be satisfactory to treat, and he will probably make trouble for you sooner or later.

If he "roasts" his last physician, do not take him; he will surely do the same by you later.

If he insists on discussing and suggesting treatment, do not take him; you will get annoyance rather than satisfaction from your efforts.

If he says he "will pay you handsomely when he is well," stop right there; he will never pay you anything, well or not.

If he is an employee who has been injured while at his work, let it be distinctly understood that he is responsible for his bill, unless you have a written agreement to pay, by some one else.

If he has been injured by the property or servants of a corporation, let it be understood that he is responsible for his bill, unless he has a written agreement by a responsible officer of the corporation to pay for your services.

You cannot charge an account to two people, "one of them will pay if the other doesn't."

When you have finished a series of visits, send bill promptly.

At the close of an office consultation, do not begin a desultory conversation or a visit with the patient. Close the professional part of your consultation plainly, so that the ensuing pause will impel him to ask what your charge is; tell him promptly and briefly and show that you are now ready to accept it; the less talk you make at this juncture, the better your client will "get the idea."

Don't get angry with a patient in a petty way or over a petty matter. Let the occasion be something worth while and handle it appropriately; let the victim of your righteous anger feel that he is in a mighty frail boat in the middle of a typhoon with a red-hot volcano in full operation on the only shore; otherwise, anger is damphoolishness.

I. BEENTHERE.

—Denver *Medical Times*, March, 1914.

DEATHS

OLIVER P. MAHAN, M.D., of London, died June 4 after a long illness, aged 87 years.

JABEZ H. MILLIKAN, M.D., died at his home in Denver, Miami County, July 3, 1914, aged 55 years.

SARAH KIVITT, widow of Dr. J. H. Kivitt of Sullivan, died June 8 of heart trouble, aged 82 years.

J. N. LUCAS, M.D., of Shelbyville, died June 9 at his home with hardening of the arteries, aged 68 years.

EVA M. DIVEN, wife of Dr. C. E. Diven of Anderson, died at her home June 15 after a long sickness with pulmonary tuberculosis.

T. M. HUNT, M.D., formerly of Millgrove, died at his home in Parker, June 17, following an illness from Bright's disease. He was 65 years of age.

BATTLE CLARK, M.D., Physio-Medical College of Indiana, Indianapolis, 1893, died at his home in New Haven, May 28, from malignant disease, aged 60.

JOHN WINDLE, M.D., died at the home of his daughter in Pendleton, June 23, aged 84 years. Dr. Windle practiced medicine in Pendleton for thirty years.

B. H. ROARK, M.D., for several years a physician of Jamestown, Ind., later of Spokane, Wash., was killed in an automobile accident at Spokane on June 2, aged 37 years.

T. N. LONSDALE, M.D., died at his home in St. Bernice on June 15, following a recent paralytic stroke, aged 71 years. He was a graduate of the Cincinnati Medical College.

J. A. BARNES, M.D., died at his home in Perryville, June 22, aged 68. Death was due to a complication of diseases from which he had suffered for several months. Dr. Barnes was a veteran of the Civil War.

FREDERICK DENKEWALTER, M.D., proprietor of the Spencer Mineral Springs hotel and sanatorium, was found dead early June 28. Death was due to heart failure. Dr. Denkwalter was born in Baden Baden, Germany, in 1843.

JOSEPH O. WALKUP, M.D., formerly of Bainbridge, Ind., who was captain in the Medical Corps of the U. S. Army and stationed at Fort Bayard, N. M., was instantly killed by lightning while driving through a storm in his touring car on June 1. He was 29 years of age.

SAMUEL H. MOORE, M.D., of Indianapolis, died June 15 after a long illness of paralysis. Dr. Moore was born in Southport, Ind., in 1843, attended Wabash College, United Military Academy at West Point, and graduated in medicine from the Indiana Medical College.

CHARLES M. BUTTERWORTH, M.D., of South Bend, died June 12 from a complication of pneumonia, heart and kidney trouble, aged 48 years. He was a member of the St. Joseph County Medical Society, Indiana State Medical Association, and the American Medical Association.

THOMAS W. MCCOY, M.D., died at his home in Boonville, July 6, aged 79. Dr. McCoy was born near Bloomfield, in Spencer County, in 1835, and began the practice of medicine at Yankeetown in 1869. On account of advancing age he was compelled to give up the practice of medicine several years ago.

EMIL GRUENING, M.D., a veteran of the Civil War, and a pioneer ophthalmologist and otologist of New York City, died at his home May 20 from cerebral endarteritis, aged 71. Dr. Gruening was a voluminous contributor to the literature of his specialty, and was the author of the chapter on "Diseases of the Eye" in Norris and Oliver's encyclopedic work. Among his most notable achievements were the development of the mastoid operation and his warning regarding the danger of blindness from the use of wood alcohol.

NEWS NOTES AND PERSONALS

INDIANAPOLIS

DR. COLIN V. DUNBAR and Miss Helen Shingler were married on June 27.

DR. AND MRS. W. S. TOMLIN are spending several weeks visiting eastern cities.

DR. AND MRS. EDGAR F. KISER are spending several weeks with relatives and friends in the East.

DR. THOMAS E. STUCKY has been nominated by President Wilson to be collector of customs for Indiana.

DRS. JAMES H. TAYLOR and Horace R. Allen, Jr., have been seriously ill with pneumonia, but are reported to be convalescent.

DR. GUSTAVUS B. JACKSON has been appointed a member of the City Board of Health, vice Dr. Mavity J. Spencer, term expired.

DR. ALBERT E. BULSON, JR., and daughter Geraldine of Fort Wayne returned July 6 from an extended vacation trip through the East.

DR. R. G. HENDRICKS of Indianapolis announces that he has moved his office from 217½ Illinois Street to 706 Hume-Mansur Building.

DR. AND MRS. CHAS. A. PFAFFLIN sail this month for Europe. Dr. Pfafflin expects to devote several months to study in the clinics of Berlin and Vienna.

MEMBERS and employees of the Health Department gave a thirty-second-degree Masonic watch charm to Dr. Mavity J. Spencer, who retired as president of the board June 1. The presentation speech was delivered by Dr. T. Victor Keene.

ALL records for the number of patients being treated at the City Dispensary are being broken this summer. In April 3,100 persons received treatment; in May the number was 3,300, and in June more than 3,300.

DR. JOHN C. KELLEY of Mitchell sailed July 14 for London, England, where he will attend the Congress of American Surgeons which convenes on July 27. He will spend the remainder of the summer visiting European hospitals.

A CLINIC for examining babies and to give advice to mothers concerning the children's health and diet is being maintained by the Children's Association. The stations are in charge of Drs. J. Don Miller, Walter D. Hoskins, Leslie H. Maxwell and Lehman M. Dunning.

INDIANAPOLIS schoolchildren to the number of 24,000 received instructions concerning tuberculosis last term. This instruction was carried on by Miss Mary A. Meyers, a trained nurse employed by the Marion County Society for the Prevention of Tuberculosis. In addition to teaching the children the value of fresh air in their

bedrooms, Miss Meyers emphasized the value of cleanliness, urging the necessity of keeping the teeth clean, and warning against eating with dirty hands.

GENERAL

DR. L. B. BITZ of Evansville has been suffering from an infected foot.

DR. J. R. HARROLD of Roll underwent an operation for gallstones on June 19.

DR. N. A. JAMES, formerly of St. Meinrad, has recently opened an office in Tell City.

HAMMOND physicians will entertain the Tenth District Medical Society in August.

THE 1915 session of the American Medical Association will be held in San Francisco.

DR. F. C. LOCKE of Rossville and Miss Etta Gerster of Dellsboro were married June 11.

DR. J. L. RECKS of Sheridan has been appointed resident physician at Ft. Bidwell, Wash.

DR. F. P. BITTERS, formerly of Rochester, has removed to Greensburg for the practice of medicine.

DR. J. HAROLD GRIMES of Danville and Miss Ruth Parr of St. Charles, Mo., were married June 3.

DR. J. B. KINSINGER of Rushville has been elected a member of the city school board for three years.

DR. J. F. CRISWELL of Churubusco and Mrs. Della Leslie of Missouri were recently united in marriage.

It is reported that Dr. E. P. Wagner of South Bend, who has been seriously ill, has made a satisfactory recovery.

It is reported that Dr. W. L. T. Grant of Muncie, who has been critically ill, has made an uneventful recovery.

DR. J. WILLARD PARRISH, Shelbyville, has been appointed physician of the Shelby County Orphans' Home.

DR. G. R. DOUGLAS of Valparaiso has recently finished a post-graduate course in Chicago and has returned home.

RICHMOND is to have a complete laboratory, the equipment to be purchased jointly by the city and the Reid Hospital.

THE commencement exercises of the Indiana University School of Medicine were held at Bloomington, June 24.

DR. CHARLES R. BIRD of Greensburg is spending the month of July in post-graduate work at Harvard Medical School.

DR. G. N. DRULEY, who has been practicing medicine in Goshen for several months, has located in North Webster.

DR. E. G. LUKEMEYER of Huntingburg recently attended a meeting of the Southern Railway Surgeons at Washington, D. C.

DR. WILLIAM VENABLE, Carmel, was thrown against a telephone pole in a runaway accident recently and seriously injured.

ST. FRANCIS' Hospital, Beech Grove, was dedicated on July 5. The Hospital will be ready to receive patients in a few weeks.

DR. J. D. HOLLAND of Harrodsburg was seriously burned early June 30, when the gasoline tank of his automobile caught fire.

DR. GEORGE G. RICHARDSON of Van Buren and Mrs. Charlotte Mary Jobe of Connersville were united in marriage on June 30.

ON flower day, held at Fort Wayne recently, \$2,000 was secured for the antituberculosis work by 100 young girls who sold flowers.

DR. LOOP of Economy is spending several weeks in the East. Dr. Keith of Modoc is looking after his patients during his absence.

THE first annual meeting of the American Association of Immunologists was held at the Hotel Chelsea, Atlantic City, on June 22.

DR. W. I. SEAL of Loogootee received a serious cut in the leg, due to flying glass from a broken window during a severe storm on June 19.

THE *Iowa Medical Journal* has discontinued publication, having been succeeded by the *Journal of the Iowa State Medical Association*.

DR. EDWARD K. NEWTON, formerly of Crown Point, has taken over the office and practice of Dr. Doolittle of Whiting, who died recently.

THE St. Joseph County Medical Society was entertained by the physicians of Walkerton on June 26 with a fish dinner at Koontz' Lake.

FORTY members of the Fort Wayne Medical Society and their families attended the annual outing of the society at Robison Park, June 30.

As a part of the scientific exhibit at this year's session of the A. M. A., Dr. J. N. Hurty presented a series of original public health motion pictures.

THE new Mercy Hospital at Gary is nearing completion, and it is expected that the hospital will be ready for occupancy by September of this year.

A NEW \$100,000 addition to St. John's Hospital, Anderson, is to be built this summer. This will more than double the capacity of the hospital.

DR. AND MRS. AMOS CARTER of Plainfield attended the commencement exercises of Yale University, where their son Charlton graduated with honors.

DR. D. J. HOLLAND of Harrodsburg met with a serious accident about 2 a. m. on June 26, when the gasoline tank of his automobile which he was filling exploded.

THE registration of the American Medical Association at Atlantic City this year was 3,958, a larger attendance than at any previous session at Atlantic City.

MRS. GEORGE F. FLICK has agreed to give the Fort Wayne Antituberculosis Society a tract of land on which to establish a tent colony for tubercular patients.

DR. W. B. ASHBY of Oakland City has been appointed coroner of Gibson County to fill the unexpired term of Dr. H. L. Bass, who has moved out of the county.

DR. H. H. SUTTON of Aurora has recently returned from a trip to Washington, D. C., where he attended a meeting of the United States Health Association.

DR. IVAN BRENNER of Winchester has recently been operated on for appendicitis in an Indianapolis hospital. He is reported to be making an uninterrupted recovery.

DR. AND MRS. FLOYD ROYSTER, formerly residents of Mt. Vernon, but for the past six years in Indianapolis, have returned and will make Mt. Vernon their future home.

NINETY acres of farm land have been bought by Marion County as a site for its tuberculosis hospital, and a committee has been appointed to secure plans for the institution.

DR. J. N. HURTY gave an illustrated lecture at Liberty, Ind., on Sunday evening, June 14. The lecture was devoted to noted men of science, particularly of the medical profession.

THE State of Indiana had the largest death-rate in 1913 of recent years. Indiana's death-rate in 1913 was 13.3 per thousand as compared with 13 in 1912 and 12.9 in 1911.

DR. J. N. YOUNKIN of Tocsin, who has been pursuing surgical studies in the hospitals and universities of St. Louis the past year, has received the degree of Master of Surgery.

DR. GEO. MILLER, formerly of Hammond, has given up his practice and has established himself near Traverse City, Mich., where he will live an out-of-door life for the benefit of his health.

DR. AND MRS. M. G. STURDEVANT of Salem have recently returned from an eastern trip which included stops at Washington, Mt. Vernon, New York City, Niagara Falls and several Canadian points.

DR. H. D. FAIR of Muncie, secretary of the Delaware County Medical Society, has recently returned from New York City, where he took a post-graduate course in the New York Maternity Hospital.

THE City of Elkhart has recently formally accepted a memorial monument and bronze statue of Dr. Havilah Beardsley, founder of the city. The memorial was the gift of Albert R. Beardsley, a nephew.

THE physicians of Hammond have decided that they want one evening each week for themselves. Accordingly they have announced that after July 1, 1914, they will not have office hours on Wednesday evenings.

DR. JAMES D. McDOWELL of Vincennes has recently returned from the East where he spent four months in post-graduate work, two months in New York City and two months in the Harvard Medical School.

WITH the June issue the *Pan-American Surgical and Medical Journal* enters the limelight of journalism. The editors-in-chief are Drs. Waldemar T. Richards and Adolph O. Hoeft of New Orleans, La.

DR. J. A. BUBSAM and family of Logansport sailed from Montreal for Europe late in June. They will visit Paris, Berne, Berlin, Hamburg, London and various points in Ireland, and expect to return home late in the summer.

As an aid to the antily campaign in Gary Dr. C. M. Reyher, secretary of the City Board of Health, has recently placed original drawings on the walls of the Commercial Club depicting the dangers of the housefly in summer time.

THE Crecent City Medical Society, composed of colored physicians, was organized recently in Evansville, and the following officers were elected: President, Dr. Jeremiah Jackson; secretary-treasurer, Dr. H. R. Thompson.

THE annual banquet of the Elkhart County Medical Society was held at Vawter Park, Lake Wawasee, June 18. The social session ended with a banquet in the evening, at which Dr. Waterman, a retired physician of Indianapolis, gave a short address.

DR. M. M. CLAPPER of Hartford City sailed June 12 for Europe, where he expects to spend some time in Vienna and Edinburgh studying medicine and surgery. He will attend the International Medical Congress in London before returning home.

DR. ROY SCOTT of New Albany and Miss Florence Mellett of Springport were united in marriage on June 8. Dr. Scott has been serving as intern in the Child's Hospital and the Lakeside Hospital in Cleveland for the past year.

THE forty-first annual meeting of the Northern Tri-State Medical Association was held at Lima, Ohio, July 14. Dr. G. W. McCaskey of Fort Wayne is president of this Association and Dr. George W. Spohn of Elkhart is secretary.

THE recent Disease Prevention Day held at Anderson was so successful that Governor Ralston has consented to issue a proclamation calling on the people of the state to observe a day in October as Disease Prevention Day. The date has been set for October 2.

DR. J. P. HETHERINGTON of Logansport received the prize offered for the presentation of the best essay on surgery at the recent annual conference of physicians and surgeons of the Pennsylvania lines, at Atlantic City. The prize was a fine sphygmomanometer.

HENRY FORD, wealthy automobile manufacturer, has recently announced the appropriation of several million dollars to finance a fight against cancer. He will change the Detroit Central Hospital, which he recently took over, into an institution for the study and prevention of cancer.

By the will of the late Dr. Joseph D. Bryant of New York a bequest of \$1,000 is made to the University and Bellevue Hospital Medical College, the income to be devoted "to instilling into the minds of the senior class the principles of ethics of the American Medical Association."

A ROUSING public health meeting was held in Vincennes on July 2. Dr. Hurty talked on the subject, "A Big Business Proposition," and called particular attention to the ravages of typhoid in Indiana every year. Just having typhoid fever costs the people of this state not less than \$2,500,000 annually.

THE water-supply of Madison and that of Bloomington has been condemned by the State Board of Health. At Bloomington, where the State University is located, the situation is so serious that the governor is said to have stated that he would remove the university unless a better water-supply was assured.

STATISTICS presented at a convention of superintendents of blind institutions of several states, held in Indianapolis recently, show that these institutions have fewer children in them now than they had twenty years ago. In Indiana the number of pupils of schools for the blind has actually decreased although the population has increased materially. This decrease in the per cent. of blindness is due largely to medical science in caring for the eyes of infants.

THE suit brought by Mrs. Anna Harrell of Shelby County against Drs. Orange G. Pfaff of Indianapolis and Moris Drake of Shelbyville for alleged malpractice resulted in a verdict in favor of the physicians in the Shelby County court, June 9. The plaintiff asked \$20,000 damages on account of the failure of the surgeons to remove a piece of gauze from plaintiff's abdomen following an operation for ruptured ectopic pregnancy, as alleged, the gauze coming away later, after having caused the patient great suffering. The surgeons showed that the gauze had been placed in the culdesac of Douglas for drainage purposes, and in a careful professional manner.

SINCE publication of New and Nonofficial Remedies, 1914, the following articles have been accepted for inclusion with "N.N.R." Those accepted during the current month are made prominent by the use of capitals:

Antiseptic Supply Co.:

STYPSTICK APPLICATORS, ALUM 75 PER CENT.

Comar & Cie:

ELECTRARGOL FOR INJECTION 10 C.C. AMPOULES.

Hynson, Westcott & Co.:

UREASE-DUNNING.

FOLLOWING the custom observed for several years, the Council on Health and Public Instruction of the American Medical Association this year furnished speakers for all Philadelphia churches desiring an address on public health on Sunday, June 21, the Sunday preceding the Atlantic City session. The following Indiana physicians delivered addresses: Dr. Frank B. Wynn, Indianapolis, "Mental Hygiene in Relation to Disease," Fiftieth Baptist Church; Dr. Charles P. Emerson, Indianapolis, "The Message of Modern Medicine," Wayne Avenue Baptist Church; Dr. Miles F. Porter, Fort Wayne, "A New Health Gospel," Fletcher Methodist Episcopal Church.

THE department "How to Keep Well" of the Chicago *Tribune* has recently given space to the following query and reply, which we consider worthy reprinting as a guide to the physician himself.

The correspondent wrote:

"Some time ago I saw an article in your columns saying that as long as people would patronize an incompetent physician, simply because of his genial manner, they would

have themselves to thank for their misfortunes. As far as I can see, the ordinary layman is in no position to judge a physician, and no one in a position to judge will commit himself further than to say that so-and-so is a recognized specialist in his line. How is the layman to judge a general practitioner?"

And the answer was:

"By the judgment and sense he shows in the ordinary affairs of life; by his attendance at hospitals, clinics, medical society meetings; by his standing with other physicians; by the books and journals he reads; by his knowledge of medicine, medical judgment and skill. Some of these items are get-at-able in every case, and all of them in some cases. At the present time the opportunities for popular education on medical subjects are so abundant that the ordinary layman should be able to judge fairly well between the physician who knows his business and the bluffing ignoramus."

THE following Indiana physicians registered at the 1914 session of the American Medical Association, held at Atlantic City, June 22-26:

Austin, Maynard A., Anderson, New England.
Barnett, Charles E., Fort Wayne, St. Charles.
Barnhill, John F., Indianapolis, The Strand.
Bechtol, Charles O., Marion, Traymore.
Bosenbury, Charles S., South Bend, Ardmore.
Boyers, James S., Decatur, The Dudley.
Bulson, Albert E., Jr., Fort Wayne, Marlborough-Blenheim.
Burrage, Severance, Indianapolis, Chalfonte.
Butler, Geo. F., Midavia Attica, Chalfonte.
Chappell, Ralph S., Indianapolis, Traymore.
Charlton, Frederick R., Indianapolis, Marlborough-Blenheim.
Clark, Edmund D., Indianapolis, Marlborough-Blenheim.
Clark, Stanley A., South Bend, Brighton.
Cleveland, W. R., Evansville, Shelburne.
Combs, Charles N., Terre Haute, Westminster.
Cook, L. H., Bluffton.
Cregor, Frank W., Indianapolis, Chalfont.
Dinnen, James M., Fort Wayne, Chalfonte.
Dowden, C. W., West Baden Springs, Traymore.
Eastman, Joseph Rilus, Indianapolis, Alamac.
Emery, C. H., Bedford, Westminster.
English, Dr. C. H., Fort Wayne, Haddon Hall.
Floyd, Benj. L. W., Evansville, Elberon.
Gerrish, M. F., Seigsmour, Devonshire.
Gilbert, J. L., Kendallville, Marlborough-Blenheim.
Gillespie, J. F., Greencastle, St. Charles.
Graham, A. B., Indianapolis, Traymore.
Hayden, A. M., Evansville, The Strand.
Hays, John W., Albion, Harrisburg.
Haywood, Charles W., Elkhart.
Holder, R. E., Columbus, Chelsea.
Holland, George Frank, Bloomington, Marlborough-Blenheim.
Hoy, B. F., Syracuse, Grand Atlantic.
Hurty, J. N., Indianapolis, Chalfonte.
Johnston, David E., Moores Hill, Beechwood.
Kasdorf, G. C., Michigan City, Virginia Villa, Kentucky Ave.
Kennedy, Bernays, Indianapolis, Marlborough-Blenheim.
Keiper, George, Lafayette, Traymore.
Kerrigan, J. V., Michigan City, Pennhurst.
Kimberlin, A. C., Indianapolis, Traymore.
Kiser, Edgar F., Indianapolis, Rudolf.
Klinger, M. E., Garrett.
Kuhn, B. F., Elkhart.
Linthicum, Porter H., Evansville, Shelburne.
Loop, A. L., Economy, New Clarion.
McAlexander, R. O., Indianapolis, New England.
McCoy, P. Y., Evansville, Alamac.
McFadden, Walter C., Shelbyville, Glaslyn-Chatham.
McOscar, Edward J., Fort Wayne, St. Charles.

Miller, Charles E., Muncie, Craig Hall.
Mitchell, Harry F., South Bend, New England.
Mix, Charles Melvin, Muncie.
Morton, R. J., Green.
Moschelle, Judson D., Indianapolis, New England.
Northrup, A. H., Markle.
Norton, William J., Hope, Chelsea.
Oliven, J. H., Indianapolis, Marlborough-Blenheim.
Osborn, Geo. R., La Porte, Continental.
Pantzer, Hugo O., Indianapolis, The Strand.
Perkins, Wm. M., New Orleans, Boscobel.
Pfaff, O. G., Indianapolis, Marlborough-Blenheim.
Pierson, Allen, Spencer, Monticello.
Porter, Miles F., Fort Wayne, Traymore.
Reynolds, D. M., Clayton, St. Charles.
Roope, Alfred P., Columbus, Chelsea.
Ross, David, Indianapolis, Marlborough-Blenheim.
Shimer, Will, Indianapolis, 334 Shelburne.
Strange, J. W., Loogootee.
Sutton, D. Harley, Aurora, Alamac.
Thompson, Winamac, 153 S. S. Carolina Ave.
Tobias, A. W., Elwood, Arondale.
Tomlin, Wm. S., Indianapolis, Craig Hall.
Trockmorton, G. K., Lafayette.
Walker, Edwin, Evansville.
Wheeler, Horner H., Indianapolis, New England.
Whery, Dr. Mary A., Fort Wayne, Westminster.
Wiederman, Frank E., Terre Haute, Marlborough-Blenheim.
Wilcox, F. H., New Albion, Champion Apts.
Williams, Dr. Alice B., Columbia City, Westminster.
Wiseman, B. W. S., Culver, Philadelphia.
Wishard, William N., Indianapolis, Marlborough-Blenheim.
Wynn, Frank B., Indianapolis, Craig Hall.

SOCIETY PROCEEDINGS

FOURTH DISTRICT MEDICAL SOCIETY

Tenth annual meeting of Fourth District Medical Society was held at S. E. Indiana Hospital for Insane, Madison, May 21, 1914.

The retiring president, Dr. L. B. Hill of Seymour, with a few remarks introduced the new president, Dr. W. E. Thomas of Clarksburg, who followed with a short address and the meeting was adjourned for luncheon.

Meeting called to order at 1:30 p. m. Minutes of last meeting read and approved.

Dr. E. U. Wood, Columbus, presented a very interesting and instructive paper entitled, "What No Students Study and All Doctors Practice."

He said that obstetrics was poorly taught in most schools but nearly every man was called to practice it, and he believes that such an important subject should be given more consideration. More attention should be given before labor. Special mention was made of asepsis and of care of third stage. Pituitrin, he considers a valuable and a dangerous remedy—valuable if used at the right time and under proper conditions and dangerous if used promiscuously. He considers the present fees entirely too small for best care and attention. A physician should give his best attention or not go. Dr. S. A. Whitsitt of Kent has used pituitrin in about thirty cases with excellent results.

A general and instructive discussion of "Post-Partum Hemorrhage and Eclampsia" followed.

Dr. W. H. Stemm presented a paper on "Cancer" with special reference to the early diagnosis. Time of operation more important than the kind. Cancer of corpus uteri more frequent in women who have not borne children and of cervix uteri in those who have borne.

Discussion opened by P. C. Bentle, Greensburg, and general discussion followed which brought out many more important points.

The paper was excellent and enjoyed by all present.

Dr. Charles E. Gillespie read a very good paper on "Tonsils and Adenoids in Relation to the General Health."

Dr. L. C. Cowan, *Rising Sun*, could not attend but sent his paper, "If Operation Is Denied, What Next?" This subject brought forth a lively discussion by Drs. Graessle, Ward, Cox, Denny and others and many interesting points were presented.

The meeting adjourned for a few minutes while the delegates met. They selected Seymour as the next meeting place. Time of meeting, May, 1915. Officers elected were: president, David E. Johnston, Moores Hill; vice-president, G. O. Cosby, Burnsville; secretary, Geo. Kamman, Seymour; treasurer, L. B. Hill, Seymour.

A clinic was held by the hospital staff in which they presented two cases of manic depressive insanity, one with melancholia, two of general paresis, and one of dementia praecox. This was very interesting and instructive to the general practitioner in that it brought out many points in examination, diagnosis and treatment of a class of cases that they, as a rule, do not take much interest in.

The meeting then adjourned to the dining-room where a banquet was served to 122 persons, after which Dr. Busse and his assistants gave a minstrel in the assembly-room that was very good and thoroughly enjoyed by all present.

Everybody that was fortunate enough to attend voted this the most instructive and enjoyable meeting in the history of the Fourth District Medical Society.

A vote of thanks was tendered Dr. Busse and his staff for their untiring efforts in making this meeting so enjoyable and for presenting such an interesting clinic.

Resolutions were passed on the deaths of Drs. W. C. Henry, Aurora, and G. O. Barnes, Seymour, and the wives of Drs. J. M. Wood, Greensburg, B. S. White, Greensburg, and Dr. Neuforth.

Meeting adjourned. FRED C. DENNY, *Secretary*.

SIXTH DISTRICT

Sixth District Medical Society met in annual session at Greenfield, Ind., May 14, 1914, with President Paul E. Trees of Hancock Society presiding, it being the custom of the district for the president of each county to preside while papers from his society are being read and discussed.

Minutes of the previous meeting read and approved and society proceeded with regular order of business.

A nominating committee consisting of one member from each county was appointed to nominate officers and select a meeting place for 1915. Officers to be nominated being: a councilor to serve three years, a president for one year, and a secretary and treasurer for one year.

This committee was composed of Drs. E. M. Glaser, Franklin County; William A. Justis, Hancock County; H. W. MacDonald, Henry County; M. Drake, Shelby County; J. C. Sexton, Rush County; Franklin Dubois, Union County, and D. W. Stevenson, Wayne County. The committee made the following recommendations:

"We unanimously present for your consideration the following officers: For councilor, Dr. O. J. Gronendyke, New Castle, Ind.; for president, Dr. L. F. Ross, Richmond, Ind.; for secretary and treasurer, H. W. MacDonald, New Castle, Ind., and recommend Liberty as place of meeting in 1915, to be held on fourth Thursday of May. We also recommend that the banquet be held

at noon hour instead of in evening, as has been the custom."

Report of this committee unanimously adopted. President Ross occupied chair during remainder of the meeting.

Dr. J. W. Parish of Shelbyville read a very excellent paper on "Poliomyelitis," which was ably discussed by Drs. Bond of Richmond, Wynn and New of Indianapolis.

"Examination and Inspection of Schoolchildren," by Dr. J. E. King, Richmond, discussed by Drs. Drake, Shelbyville; A. L. Bramkamp, Richmond, and F. C. Heath, Indianapolis.

At this time Dr. Marvel made motion that discussions of papers be dispensed with, that essayists might all be given time to present papers. Motion carried.

"Some Phases of Pneumonia," presented by Dr. Cupp, Metamora. A very excellent paper, showing much careful study and investigation. "Some Recent Advances in Diagnosis," Dr. Charles P. Emerson, Indianapolis. "Surgical Cases of Chronic Constipation," Dr. J. C. Sexton, Rushville. "Rational Rather Than Routine Measures in the Treatment of Puerperal Eclampsia," Conclusions Based on the Treatment of Eighteen Cases," Dr. O. J. Gronendyke, New Castle.

This concluded program and society adjourned to Columbia Hotel at 6 o'clock, where members of the Hancock County Society had prepared an elegant dinner. Councilor O. J. Gronendyke presided as toastmaster and Rev. Joshua Stansfield of Indianapolis delivered a splendid address, his subject being "The Doctor."

This was a fine meeting from every point of view. The papers were all very good and showed careful study and investigation on the part of the ones who prepared them. The discussions were also good.

The attendance was good and, last, but not least, the dinner was all that one could ask, thanks to the Hancock County Society.

We hope to see every member of the district present at our next meeting at Liberty, the fourth Thursday of May, 1915. H. W. MACDONALD, *Secretary*.

INDIANAPOLIS MEDICAL SOCIETY

Meeting of May 5, 1914—Washington Hotel

Session called to order by president. Minutes read and approved. Applications of Dr. Frank B. Fisk and Dr. Simon Reislser read second time.

Dr. Wynn moved to have committee appointed to make arrangement for large attendance at a clinic to be given by Dr. Price of Cleveland to demonstrate an apparatus for determining pulse-rate, temperature, rate of inspiration, etc. Drs. Wynn, MacDonald and Hadley were appointed by the chair.

Dr. T. B. Noble reported a case of ovarian carcinoma.

Dr. Frank W. Cregor gave reports on skin cancer with caustic treatment and eczema of hands.

Dr. J. A. MacDonald reported a case of primary tuberculosis of sternum.

Dr. H. F. Beckman reported a case of elephantiasis vulvae.

Adjourned.

ALFRED HENRY, *Secretary*.

Meeting of May 12, 1914

Session called to order by president. Application of Wm. V. Boyle read first time.

Dr. Frank B. Wynn gave a lecture on mountains and mountain climbing, illustrated by a great number of

stereopticon slides, the most of which were his own production. The theme of his well-received talk was "Recreation as a Factor in Mental and Moral Efficiency."

A full house received Dr. Wynn's lecture with enthusiasm. A smoker followed.

ALFRED HENRY, *Secretary*.

Meeting of May 19, 1914—General Insane Hospital

Dr George F. Edenharter, superintendent of hospital, had issued invitations to members of the society to be present at an opening of the new building known as the Cornelius Mayer Hall.

One hundred seventy-five turned out and were royally entertained.

The president had invited all the ex-presidents of the society to sit on the stage. Drs. A. W. Brayton, W. N. Wishard, George J. Cook, O. G. Pfaff, Theodore Potter, A. C. Kimberlin, S. E. Earp and H. E. Gabe were present.

The program was in two parts.

Part I. "The Insane Diathesis," with report of cases, Dr. M. A. Bahr.

The Insane Diathesis

Severe hereditary taint plays a rôle in the etiology of many psychoses, and often modifies the course and symptoms in a definite direction. Apart from these fully developed psychoses, slight alterations of the personality are often observed which are simply designated as constitutional psychopathic states. There exists numerous gradations between normal health and the psychoses. Special stress was placed on a group of patients who are not feeble-minded, who, psychologically, by the Binet-Simon tests, because of certain mental symptoms manifest themselves aside from the fully developed psychoses. These as children appear frequently to be normal as far as intelligence is concerned, are even at times considered very bright with plenty of shrewdness and cunning. Ethically they are often splendidly endowed, but on close examination it will be noted that they are very superficial and frequently in early life commit all sorts of misdemeanors and come in conflict with the law. In this group we find the wayward girl and the incorrigible boy who frequently shock their communities with their early criminal tendencies. In other cases, well-pronounced psychopathic endowment merely manifests itself in ill-defined, partial, or latent imperfections, such as eccentricities, moral insensibility, and unsociableness, which are not consistent with normal development. In other cases, well-pronounced psychopathic manifestations, as hallucinations, illusions and delusions, appear in childhood.

"Presentation of a Case of Juvenile Paresis," Dr. F. C. Potter.

A Case of Juvenile General Paresis

C. F., aged 17 years, father (?) living, uses alcohol moderately. Two of his sisters insane and one brother feeble-minded. Mother, at seventeen, had a rash over her body, accompanied by sore throat and ulcerated mouth. Seven months later, gave birth to our patient. Blood serum gives a strongly positive Wassermann reaction. Mentally, she is below the average. Four half brothers show evidence of syphilis.

At 12 years of age patient was struck over head with a club and was unconscious several hours. At first complained of severe pain in his head, became fretful and irritable. After a period of depression, had a severe general convulsion. During following night, he became violent and threatened to kill the members of his family. Patient is an undeveloped, poorly nourished, white male. Gait, tottering; deep reflexes are all markedly increased. Blood serum gives a very strongly positive Wassermann reaction. Spinal fluid shows increased tension; increased globulin; no reduction with Fehling's solution; pleocytosis. Patient is completely disoriented; consciousness is clouded; attention is held with great difficulty. Memory is impaired for remote and recent events; train of thought is irrelevant and incoherent; evidence of auditory and tactile hallucinations; mild childish ideas of grandeur. Repeats test phrases poorly and writes a tremulous, scrawling signature.

The society unanimously voted to extend its sincerest thanks and appreciation to Dr. Edenharter for his kindly remembrance and fraternal devotion.

Part II. Dr. Edenharter addressed brief remarks to his visitors expressing his appreciation of so large a turnout of the Indianapolis Medical Society. He said the last three new buildings had been dedicated similarly. After tipping off the meaning of Niagaemocklatyalptae (read backwards, "eat, play, talk, come again"), the audience was ushered to the floor below and kept busy until a late hour.

ALFRED HENRY, *Secretary*.

Meeting of May 26, 1914—City Hospital

Meeting called to order by the president. Application of Dr. Carl W. Rutledge up for first reading. Health officers of the state were in their annual meeting in the city. They were invited as a body to attend a clinic arranged especially for them. Attendance 120.

PROGRAM

Case reports: Tuberculous serositis, with patients shown by Dr. J. A. MacDonald.

Dr. David Ross showed a case of tumor of the abdomen of questionable pregnancy. Dr. Jane Ketcham had made the Abderhalden test for pregnancy and said it was positive.

Case reports: Cerebrospinal meningitis. Dr. W. D. Hoskins. After these reports Dr. Hoskins demonstrated the technic of lumbar puncture and administration of Flexner's serum.

Dr. J. W. Sluss, superintendent of the city hospital, served refreshments. ALFRED HENRY, *Secretary*.

FORT WAYNE MEDICAL SOCIETY

Meeting of November 25

Society met in regular session in the Assembly Room with twenty-one members present.

Minutes of previous meeting read and approved.

Clinical cases:

Dr. G. W. McCaskey reported a case of diabetic coma with the presence of acetone in urine and the absence of diacetic acid.

DISCUSSION

Dr. C. G. Beall: We do not know very much about the intricate workings of metabolism of the end product of fat or its final disposition. We cannot offer an

explanation to the cause of acetone being present and diacetic not. I think the best criterion of the danger point in diabetes is the ammonia excretion.

Dr. McCaskey (in closing): The consensus of opinion is that a fatal acidosis cannot occur when oxybutyric acid is absent.

Dr. C. C. Grandy reported the following cases:

Miss B. H., City; 34 yrs.; German-American; student; father died of apoplexy at 64; mother living, four brothers living and well; none of the diseases of infancy; menses began at 16; regular; at 22 had an attack of nervous prostration; hands and legs rigid; mind became unbalanced; sick six or seven months; typhoid at 28, sick six weeks; about this time noticed a small growth about the size of a hazelnut in the right breast on inner surface; no pain; seen by doctor who said there was nothing serious about it; four years later this growth was about the size of an egg and was diagnosed as "stone cancer" and removed with a paste; all healed up in about three months; at the edge of the scar patient noticed a slight ridge growing slowly; first noticed about two months following application of paste; two years later this ridge was about four inches long and as thick as the finger. In June, 1913, fell on right knee; broke hip; intracapsular fracture; three weeks later breast was exhibited to doctor who had it removed; proved malignant; had same pain in right thigh one year ago; had an osteopath take care of her but has limped in that leg for six months previous to her fall. Lost 15 lbs. in weight last year; appetite fair; has some headache and enlarged glands in axilla and groin.

DISCUSSION

Dr. Rawles: In Murphy's Clinic he showed cases of this type. He speaks of lymphatic channels by way of metastasis (axillary and anterior mediastinum sixth axillary interspace, the channel between the chest and the umbilicus).

Dr. Duemling: The pain was not a very permanent symptom in this case; on account of her age I was surprised to find an intracapsular fracture of the femur and also what I suspected was a metastatic growth in the bone.

Dr. Weaver: In getting the history of these cases we are often mistaken in the interpretation of injuries; no doubt the bone disease in this case antedates the injury to the hip.

Dr. Grandy (in closing): Murphy makes this point—that these hips are diseased before injury.

Dr. Gross: Female 14 years; received gasoline burn extending from the jaw to the ankles; was treated with picric acid. What kind of a prognosis would we give these parents?

DISCUSSION

Dr. Rawles: I had a case similar to this one which lived about ten days; died in uremic coma.

Dr. Morgan: We have been taught that when one-third of the body surface is burned, the patient will die; I had a case where over one-third of the body surface was burned and the patient got well.

Dr. Wallace: I had a case in which a woman was burned over a very large area; this patient got well after long tedious treatment.

Dr. Weaver: The most interesting phases are the terminal findings in these cases of burns; most frequently duodenal ulcer and acute nephritis are present.

Dr. Rawles reports the following cases:

Case 1. Multiple osteomyelitis; due to congenital syphilis.

Case 2. Enlarged thyroid (exophthalmic) male patient.

Case 3. Exhibition of specimen of breast and case history of malignant growth following trauma.

DISCUSSION

Dr. Grandy: Why would not single doses of neosalvarsan be indicated in this congenital syphilis case?

Dr. Porter: In a large number of these thyroid cases a lobectomy is not sufficient. In the last few months I have had several cases in which a lobectomy was not sufficient to cure. A clinical fact with which I have been struck often is—(given) a tumor of the breast that is painful spontaneously should make one think of benignity rather than malignancy. Cancers are proverbially not painful.

Dr. Rhamy: In regard to this tumor, the microscopic picture shows myxo-fibroma; the myxomatous element shows a possible malignancy.

Dr. Weaver: I would like to know the microscopic picture of this gland as to whether this case was one of hypertrophy or all simple goiter. The Mayos do not pay any attention to any definite amount of the gland they leave behind.

Dr. Porter: You will never find an exophthalmic goiter in which you do not have a hyperplasia of the gland structure.

Dr. Rawles (in closing): I will have this child's eyes examined and if they are normal will give neosalvarsan.

Communication of Sec. Gott, of the Board of Medical Registration and Examination, relating to the method of obtaining sufficient evidence, and its proper disposition to attack a license of any practitioner in the state of Indiana. Motion made that the Secretary submit an hypothetical question to the attorney-general and read his reply to this Society. Carried. Bill for \$1.50 allowed to C. W. Rheling for operating stereopticon lantern.

Adjourned.

G. VAN SWERINGEN, Secretary.

Meeting of Dec. 2, 1913

Society enjoyed its annual dinner December 2 at the Elk's Temple. About twenty-five members and their wives sat down to a delicious menu which was followed by a toast program.

Meeting of Dec. 9, 1913

Society met in regular session in the assembly room of the court house, nineteen members present. Meeting called to order by President Gross. Minutes of previous meeting dispensed with on account of absence of secretary.

Clinical cases:

Dr. Rawles reported following cases: Male, 56; usual children's diseases; no rheumatism; light attack of tonsillitis a few years ago; examined in 1907; found soft systolic murmur at apex of heart. In 1912 had an acute attack of dyspnea; heart gave confusion of sounds; first sound high-pitched squeak, second sound lower, soft blowing murmur at apex. Apex out of axillary line; urine negative; edema of legs; three weeks ago had general anasarea, ascites, marked dyspnea; large bullae on legs. Tapped nine days ago; drew gallon of serum from abdomen and one-half gallon serum from scrotum, with continuous seepage from wound. Died two days ago; post-mortem: chest contained much fluid; heart 10 inches long; mitral valve noncompensated; foramen ovale patent. Several openings in interauricular septum.

DISCUSSION

Dr. Erwin: Saw this patient last winter; at that time had systolic murmur in left heart; heart enlarged; edema cleared up on digitalis and nitroglycerin for a while, but improvement did not continue.

Dr. Beall: It would be interesting to know whether or not this man was a blue baby; thinks case a good demonstration of physiologic action of digitalis.

Dr. Morgan: It is remarkable that this individual attained the age that he did; oldest patient of his own of this kind was eight years old.

Dr. Beall reported following case: J. H., 35 years, obese. Complains of incontrollable somnolence; impaired vision and loss of sexual power for last year; tongue sore at base; family history negative; personal history negative, except for gonorrhea; blood-pressure 150; urine negative; blood negative as to whites, reds a little over six million.

DISCUSSION

Dr. Edlavitch: Saw a similar case diagnosed narcolepsy.

Dr. Beall (in closing): Man was given pituitary extract; showed improvement.

Paper by Dr. Van Buskirk: Cholelithiasis, with a report of two cases.

DISCUSSION

Dr. Porter: Two things that are striking: first, that the gall-duct or gall-bladder cases do not come complaining of symptoms referable to that area, but to the stomach; second, that the danger of presence of cholelithiasis of long standing leading to malignancy. Chronic stomach trouble of long standing is commonly due to gall-bladder disturbances or appendicitis.

Dr. Bruggeman: I am unable to account for the coma present in the first case reported, because of recovery from first attack. I do not think that second case was cancer of the gall-bladder.

Dr. Erwin reported a case of chronic jaundice, found later to be due to obstruction of the common duct by stone; died in one week from post-operative hemorrhage.

This being the date for election of officers, society proceeded for same. Nominations for president were in order. Drs. Beall, Dancer, Glock and Snyder were nominated. Drs. Beall, Glock and Snyder withdrew. Motion carried that Dr. Dancer's election to presidency be made unanimous. Nominations for vice-president—Dr. Glock's name presented. Nominations closed. Motion carried that rules be suspended and secretary cast ballot for vice-president. Nominations for secretary—Dr. G. Van Sweringen's name presented. Nominations closed. Motion carried that rules be suspended and secretary cast ballot for secretary. Nominations for treasurer—Dr. E. E. Morgan's name was presented. Nominations closed. Motion carried that rules be suspended and secretary cast ballot for treasurer. Dr. E. E. McOscar was reelected a member of the Board of Censors by suspension of rules. Delegates to state society, Drs. Gross and Beall.

B. P. WEAVER, *Secretary pro tem.*

Meeting of Dec. 16, 1913

Society met in regular session at Hope Hospital with seventeen members present. Clinical night. Minutes of previous meeting dispensed with temporarily on account of absence of secretary.

Dr. Porter presented two cases of breast tumor removed and frozen sections made; pronounced benign; on repeated sections later adenocarcinoma in one case and scirrhus carcinoma in the other; partial dissection was done in the second case while waiting for report on the

frozen section. Clinical diagnosis in first case was non-malignant; in second malignant; sections of these tumors were shown microscopically.

DISCUSSION

Dr. Bruggeman: Suggests that such accidents may explain many so-called malignant degeneration of benign tumors.

Dr. Rawles: Asks if malignant changes are not more constant in center of tumors.

Dr. Edlavitch: Says large tumors are more apt to show malignancy in center of growth; small tumors show the same character throughout as a rule. Thinks first case was originally a benign adenoma.

Dr. McOscar: Cited a case of woman who wanted mastotomy; had pain in breast; no nodule determinable at present, though they have been found; advised radical operation.

Dr. Porter (in closing): Tumor is a late manifestation of malignancy; cited several cases of breasts with bloody discharge; some pain; some with retracted nipples; found to be malignant. Age has nothing to do with cancer; early cancer most malignant of all.

Dr. McCaskey presented the following cases:

CASE 1.—Male; 68; complained of coated tongue; anorexia; had had attacks of "auto-intoxication"; obstinately constipated; nycturia and increased amount of urine at night; found to have blood-pressure 205 mm.; urinalysis shows albumin and a few hyaline casts; phthalein two hours and ten minutes gave zero per cent.; no phthalein through in four hours; physical examination shows marked emaciation; no edema; no ascites; markedly enlarged prostate; marked intention tremor, probably due to senility or arteriosclerosis of vessels of cerebrum.

CASE 2.—Male; 61; history of probable peptic ulcer and long-standing nephritis; now has marked dilatation of stomach; probably tumor; stasis; Roentgen ray shows probable carcinoma on old ulcer base; has had some edema of ankles; intermittent occult blood in stool and lavage specimen.

CASE 3.—Multiple osteomata; thirty-five to forty in number; beginning at 4 years of age and continuing to puberty; Roentgen-ray pictures of growth shown; involves every long bone of the body.

DISCUSSION

Dr. Porter: Thinks that Case 2 probably has a gall-bladder disease as well.

Dr. Bruggeman: Agrees with Dr. Porter; would not depend on one set of Roentgen-ray negatives.

Dr. Weaver: Thinks that case probably has more than one lesion. Evidently has some pyloric obstruction and probably lesion in cardiac end of stomach; these findings warrant an exploratory operation.

Dr. Edlavitch: Classified bone tumors as follows: Osteomata (called bony tumors), including oxostosis and osteophytes. These are multiple benign osteomata; sometimes are congenital though these are acquired; treatment is unnecessary unless tumors are malignant by size.

Dr. McCaskey (in closing): Emphasized point in case of ulceration of the stomach and general arteriosclerosis. Thinks Case 2 had two ulcerations—one first of pylorus and later at the gastric end of stomach.

Dr. Porter exhibited Kimpton's tubes for direct transfusion of blood. Lives are being lost because transfu-

sion is not being used enough, due to difficulty of technic and delay until patient is moribund, or fear of hemolysis or agglutination; technic is relatively simple with these tubes. Blood can be tested for hemolysis if time permits.

Dr. Weaver presented four Roentgen-ray plates of fractures of the femur—(a) base of neck of femur, (b) subtrochanteric, (c) middle of shaft, (d) supra-condylar.

Dr. Porter: Abduction of both legs is necessary to insure perfect abduction.

Motion made that secretary write Attorney-General Honan, presenting inquiry as to action of Board of Medical Registration and Examination relative to the revocation of licenses, the method of procedure in obtaining evidence to present to said board. Carried. Honorarium of \$50 allowed to secretary. Motion made and carried that the society present usual Christmas present to janitors of court house, which consists of a check for \$5.00 to Mr. Cal Bean, and a box of cigars to the rest of the janitor force. Retiring President Gross in a few brief remarks thanked the society for their cooperation during his term of office.

Adjourned.

G. VAN SWERINGEN, *Secretary*.

DELAWARE COUNTY

The regular meeting of the Delaware County Medical Society was held Friday afternoon, June 5, in the lecture-room of the Muncie public library, with Dr. D. M. Green, president, in the chair.

Dr. H. S. Bowles introduced as a clinic a case of progressive muscular dystrophy, the patient being a boy 7 years old.

Dr. W. J. Molloy, a retiring health officer of the city of Muncie, delivered an able address dealing with the milk problem of the present day. The following statements are abstracts:

"The relation of milk to disease in early life is very intimate for milk is best culture medium for distribution of disease, therefore infant mortality is largely due to improper feeding. There is nothing equal to properly modified milk from the cow as a substitute for mother's milk. Recognizing this fact, the scheme of providing a certified milk was perfected in New Jersey about twenty years ago, but has not become popular mainly for two reasons. The cost of certification raises the price to at least 16 cents per quart, and because of general apathy on the part of the consumer and ignorance of mothers as to what a baby ought to have for a safe diet. At this day only about half of 1 per cent. of the milk used is certified. In certain states medical milk commissions composed of a veterinarian, chemist, bacteriologist and dairy physician have been organized. Cows must be tuberculin tested, employees must be free from disease and use every precaution to keep themselves and everything connected with the dairy as nearly aseptic as possible. The milk is immediately put in bottles and quickly cooled to 50 F. This milk, according to standard test, must not show over 10,000 bacteria to the c.c.

"Tuberculosis is most commonly found in human beings and cows. From 10 to 20 per cent. of all herds are found to be tubercular, consequently the greatest source of tuberculosis is in humanity and cows. The bovine type of tuberculosis is found to be relatively common in children. Pasteurization never made an

impure milk pure. Pasteurization may make milk safe which would otherwise be dangerous. Dairies have greatly improved in the last few years and will continue to do so as the public awakes from its indifference and demands a better milk. We ought to have milk inspectors with limited territory, to oversee the supply while the consumers are being taught the dangers of impure and disease-laden milk. Frequent inspection, including a bacteria count, and publicity when either condemnation or approval is merited is the best means of improving the milk supply. A committee appointed by the New York Milk Commission has devised a method of milk classification that is worthy of more general adoption. Grade A may contain from 50,000 to 100,000 bacteria per c.c. as it comes from the cow. Grade B over 100,000 and under 1,000,000. Grade C over 1,000,000 before pasteurization. It is evident that grade C should be used only for cooking and manufacturing purposes. Visible dirt in milk is repulsive but not so dangerous as invisible bacteria.

"It is estimated that 14 out of every 100 die of tuberculosis, and 50 per cent. of the balance brought to autopsy show signs of this disease; and tubercular cows are a factor that should be more generally recognized. A campaign of education ought to be inaugurated. Women's clubs and kindred organizations should be presented with the facts as the physician sees them, and when public opinion is aroused to the pitch the situation warrants, the dairyman will be compelled to furnish a pure and wholesome milk and the consumer will recognize its value and pay the price."

In discussion, Dr. D. M. Green deplored the milk situation in Delaware County and said he was afraid to recommend modified cow's milk for artificial feeding because of the uncertainty of obtaining a safe milk from any of our sources of supply. As conditions now exist he prefers some of the proprietary foods.

Dr. W. W. Wadsworth graphically portrayed the dangers lurking in the milk supply of the small dealer, sometimes the man having only one cow or two cows. His small can of milk, sold to the dairyman who supplies a route, when poured into and mixed with the product from an ideal dairy, may pollute or make unsafe every quart delivered by the way. Epidemics of disease have been traced to a supposedly insignificant source of supply.

A committee composed of Drs. Molloy, Wadsworth and Stephens was appointed to further investigate the situation in our county and make specific recommendations.

Adjourned.

H. D. FAIR, *Secretary*.

LAKE COUNTY

Lake County Medical Society met in regular session at Gary Public Library, Thursday, June 11, at 7 p. m., Dr. J. W. Iddings presiding. Attendance, thirty members and four visitors.

Minutes of May meeting read and approved.

On motion of Dr. Oberlin, Dr. Nesbit, councilor-elect for the tenth district, was unanimously elected to honorary membership in this society.

Dr. Carl B. Davis of Chicago gave an illustrated talk on "Goiter." He presented pictures showing various phases of the subject, and gave a brief report of the research work being carried on in Chicago. An informal discussion followed the talk.

Dr. O. B. Nesbit of Valparaiso discussed informally "The Relation of the Health Officer to the Physician." He urged the society to take immediate steps toward the establishing of a tuberculosis hospital in Lake County. On motion of Dr. Shanklin, this matter was referred to the Committee on Public Health and Legislation, as was also the matter of the Nelson amendment to the Anti-Narcotic bill now pending in the United States Senate.

Adjourned.

E. M. SHANKLIN, *Secretary*.

LAWRENCE COUNTY

Lawrence County Medical Society met June 8 at Bedford, Ind., with Dr. Perkins in the chair.

Minutes of previous meeting read and corrected.

Communication from Red Cross Society read, and motion to lay on table carried.

Drs. J. N. Hurty and Shimer of Indianapolis were guests of the society.

Dr. Joseph Heitger presented a paper on "Diseases of the Middle Ear," which was discussed by Drs. Short, Norman, Emery, Shimer and Perkins.

Dr. Short presented a paper on "The Advance in Surgery in the Last Twenty Years." Dr. Short said, in part:

"Advances in surgery in the last twenty years equal that of any other science. Operations that were done two decades ago only in large surgical centers are done now in very many of the smaller towns in the country. Establishment of hospitals all over the country has greatly facilitated the advance in surgery. Surgical technic of twenty years ago was very crude compared with that of to-day, and mortality then very much greater than now—this particularly with reference to abdominal surgery. Asepsis and antisepsis in surgery and anesthesia are better understood to-day than twenty years ago.

"Twenty years ago laryngotomy and tracheotomy were rarely heard of, and entering the abdominal cavity by local surgeons religiously avoided. To-day it is an every-day or every-week occurrence, and done by a great many local surgeons.

"The greatest advance in surgical operations at the hands of surgeons in the big institutions has been in operations on the stomach and neck, and, lately, in bone surgery.

"Principal factor in wonderful advance in surgery in past twenty years has been proper conception of proper technic."

Discussion by Drs. Heitger, Emery and Dollens.

Dr. Norman read a paper on "Cardiac Lesions" and presented case report. Discussion by Drs. Shimer and Hurty.

Dr. Emery presented a patient with trachoma of twenty years' standing and gave treatment in presence of society.

Dr. Shimer of the State Board of Health gave instructions on the technic of the Widal test.

Dr. J. N. Hurty, secretary of the State Board of Health, gave an address on the condition of health office work.

Motion carried that the society petition the members of the legislature to protest against the amendment to the Harrison Antinarcotic Bill soon to come up for action.

Adjourned.

F. S. HUNTER, *Secretary*.

SPENCER COUNTY

The Spencer County Medical Society met in regular session at Lincoln City, Ind., June 17. Meeting called to order by president.

Dr. C. W. Bradly read a paper on "Infant Stools as a Diagnostic Measure." Paper was discussed by Drs. Weiss, Medcalf, J. P. Salb and White.

This was followed by a paper by Dr. N. L. Medcalf on "Blood-Pressure." He suggested that blood-pressure be taken at every examination, naming especially pneumonia, typhoid, cardiac diseases, nephritis and pregnancy. Blood-pressure more valuable in persons over forty years than under this age. Dr. Weiss led the discussion of this paper, followed by Dr. J. P. Salb, state president.

Dr. O. T. Crafton was a visiting physician and took part in the discussions.

Adjourned.

H. Q. WHITE, *Secretary*.

WHITLEY COUNTY

The regular meeting of the Whitley County Medical Society was held in Columbia City on Tuesday, June 9, at the Marquette Club.

Dr. R. M. Bolman of Fort Wayne read a paper on "Renal Calculi."

Dr. N. I. Kitheart read a paper on "The Diagnosis of Insanity."

General discussion.

Adjourned.

D. S. LINVILL, *Secretary*.

ABSTRACTS

NEOSALVARSAN

The results of the use of neosalvarsan in 108 cases of syphilis are reported by Surgeons KENT NELSON and E. F. HAINES, of the United States Military Prison at Fort Leavenworth, Kansas (*Journal A. M. A.*, March 28). The series includes 340 intravenous injections of neosalvarsan by the puncture method. The character of the reactions following injections were: severe, 1; moderate, 3; mild, 58; absent, 278. Any case with temperature above 102 was called severe and like the majority of the reactions occurred in the secondary stage of the disease. Mercurial treatment was also used. The authors sum up their conclusions in the following: "1. Five injections of neosalvarsan combined with intensive mercurial treatment, have failed to show as good curative results, as shown by the serum reactions, as did one dose of salvarsan. 2. In order to 'cure' 70 and 80 per cent. of our cases, it will be necessary to use four or five times as much neosalvarsan as salvarsan. 3. In view of the increased number of injections of neosalvarsan to bring about 'cures' as stated in conclusion 2, it becomes a far more expensive drug to use. 4. The drug should be used which will bring about the best results in the shortest possible time. 5. The complement-fixation is of the greatest value in the diagnosis, or as an indicator to the results of the treatment. 6. In all doubtful cases at least two or three Wassermann tests should be made before a diagnosis is decided on."

PEPTIC ULCER

J. N. Hall, Denver (*Journal A. M. A.*, March 28), believes that all cases of peptic ulcer deserve careful study as regards diagnosis, followed by proper medi-

cal treatment till it is found no longer useful. In no disease is a reasonably certain diagnosis so closely bound up with possible error and, while modern methods make possible a high degree of certainty, there are enough cases in which error seems unavoidable to make long delay in recourse to surgery unavoidable. He has seen repeated errors in diagnosis in cases coming to operation that had been made by the highest authorities and does not doubt that he, himself has been guilty of such errors. There is much truth in the remark attributed to Moynihan, "The most frequent site of gastric ulcer is in the right lower quadrant of the abdomen," and it is unfortunate that this is not more generally recognized. He mentions certain unusual conditions capable of operative diagnosis that may simulate gastric ulcer, such as pinching of the pylorus and duodenum in a Treitz hernia, compression of the duodenum by the superior mesenteric vessels, kinking, pressure from gall-stones and various obstructive distortions. A case of this kind is described. Ulcer is occasionally diagnosed in cases in which the true diseased condition is a small central-line hernia through the abdominal wall which, Hall believes, may cause pyloric spasm and gastric retention. An erroneous diagnosis of ulcer in cases of crisis of tabes, should, Hall thinks, be laid at other doors than that of the internist and yet the two conditions may coexist, as well as the others, like appendicitis, gall-bladder disease, etc. We have also, the dangers of unrecognized complications, such as malignant disease, and the general recognition of the fact that a greatly dilated stomach, embarrassing nutrition, thus making the way for other grave disease, should also be considered. The forceful figures from the Mayo clinic as to the frequency of cancer from gastric ulcer, need only be referred to. The danger of death from hemorrhage and perforation is well recognized. For all these reasons there is an early limit beyond which further use of test-meals, lavage, special diet, etc., is unjustified. Finally, Hall says, "The medical man who treats his patients indefinitely under the diagnosis of hyperacidity, acid gastritis, gaseous indigestion, biliousness, gastralgia, dyspepsia, etc., should familiarize himself with the actual findings at operation in such digestive diseases, as he may do at any clinic at which these conditions are regarded as on the border-line, and hence are investigated conjointly by the physician and the surgeon, as they should be everywhere."

SYPHILIS

After noticing the important advances that have been made, especially in regard to syphilis of the nervous system, H. S. BERNSTEIN, Albany, N. Y. (*Journal A. M. A.*, March 21), makes a suggestion that in all cases of syphilis, especially those in the primary and secondary stages, the patient be given an intraspinal injection of salvarsanized serum as a prophylactic measure according to the Swift and Ellis method. Every syphilitic patient is a potential parietic, and it is therefore important to destroy the organisms before they have entrenched themselves in the regions of poor vascularity. This measure offers a possibility of reduction in the number of those becoming public charges as the result of cerebrospinal lues, and is suggested in the hope that those who have the opportunity may give it a test.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1914, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

ELECTRARGOL.—Electrargol is a colloidal solution of silver, containing silver, equivalent to 0.25 per cent. metallic silver. It is said to be useful in febrile diseases, even in those which are not of a septic character. It is also used externally in inflammatory conditions. For subcutaneous, intramuscular or intravenous injections electrargol is supplied as Electrargol for Injection in ampoules containing 5 c.c. For external use electrargol is supplied as Electrargol for Surgical Use in bottles containing 50 c.c. (*Jour. A. M. A.*, June 6, 1914, p. 1808).

REFINED AND CONCENTRATED TETANUS ANTITOXIN.—Marketed in packages containing 5,000 units (curative dose put up in syringe containers. E. R. Squibb & Sons, New York (*Jour. A. M. A.*, June 13, 1914, p. 1890).

CULTURE OF BULGARIAN BACILLUS, MULFORD.—A pure culture in tubes of the *Bacillus bulgaricus*. It is designed for internal administration for the purpose of establishing lactic-acid-producing bacilli in the intestines and for external use. H. K. Mulford Co., Philadelphia, Pa. (*Jour. A. M. A.*, June 13, 1914, p. 1890).

LACTOBACILLINE TABLETS.—A pure culture of the *Bacillus bulgaricus*. These tablets give rise to the production of considerable quantities of lactic acid, which tends to restrain the growth of putrefactive organisms in the intestines. Franco-American Ferment Co., New York (*Jour. A. M. A.*, June 13, 1914, p. 1890).

LACTOBACILLINE LIQUIDE, CULTURE A.—A pure culture in tubes of the *Bacillus bulgaricus* grown in a neutralized sugar bouillon, each tube containing from 5 to 6 c.c. Its actions and uses are the same as those of Lactobacilline Tablets, Franco-American Ferment Co., New York (*Jour. A. M. A.*, June 13, 1914, p. 1891).

LACTOBACILLINE LIQUIDE, CULTURE D.—A pure culture in tubes of the *Bacillus bulgaricus* grown in a neutralized bouillon. Its action and uses are the same as those of Lactobacilline Tablets. Marketed as Lactobacilline Liquide, Culture D., Small containing 5 c.c., and Lactobacilline Liquide, Culture D., Large containing 16 c.c. in each tube. Franco-American Ferment Co., New York (*Jour. A. M. A.*, June 13, 1914, p. 1891).

LACTOBACILLINE LIQUIDE, INFANT'S CULTURE.—A pure culture in tubes of the *Bacillus bulgaricus* in a whey medium. It is employed in the treatment of diarrhea or dysentery in nursing infants or young children. Franco-American Ferment Co., New York (*Jour. A. M. A.*, June 13, 1914, p. 1891).

LACTOBACILLINE GLYCOGENE TABLETS.—Tablets containing pure cultures of the *Bacillus bulgaricus* and the *Glycobacter peptolyticus*. The *Glycobacter peptolyticus* transforms into sugar the amylaceous substances in the diet, thereby furnishing a pabulum for the *B. bulgaricus*, which in turn transforms the sugar into lactic acid. These tablets are designed for the prevention and treatment of intestinal diseases. Franco-American Ferment Co., New York (*Jour. A. M. A.*, June 13, 1914, p. 1891).

LACTOBACILLINE GLYCOGENE LIQUIDE.—A pure culture in tubes of the *Bacillus bulgaricus* and the *Glycobacter peptolyticus*. Its action and uses are the same as those for Lactobacilline Glycogene Tablets. Marketed as Lactobacilline Glycogene Liquide, Small containing 5 c.c., and Lactobacilline Glycogene Liquide, Large containing 16 c.c. in each tube. Franco-American Ferment Co., New York (*Jour. A. M. A.*, June 13, 1914, p. 1891).

LACTOBACILLINE MILK TABLETS.—Tablets containing pure cultures of the *Bacillus bulgaricus* and *Bacillus paralacticus*. These tablets are used in the preparation of scientifically soured milk. Franco-American Ferment Co., New York (*Jour. A. M. A.*, June 13, 1914, p. 1891).

LACTOBACILLINE SUSPENSION.—A pure culture in tubes of the *Bacillus bulgaricus* grown in a neutralized bouillon medium. This culture tends to inhibit the growth of deodorant, putrefactive and pathogenic organisms and is used externally in various suppurative conditions. Marketed as Lactobacilline Suspension, containing 5 c.c. and Lactobacilline Suspension, Surgical, containing 20 c.c. in each tube. Franco-American Ferment Co., New York (*Jour. A. M. A.*, June 13, 1914, p. 1891).

LACTOBACILLINE MILK FERMENT.—A pure culture in tubes of the *Bacillus bulgaricus* and *Bacillus paralacticus*. Its action and uses are the same as those of Lactobacilline Milk Tablets. Franco-American Ferment Co., New York (*Jour. A. M. A.*, June 13, 1914, p. 1891).

PROPAGANDA FOR REFORM

SCOPOLAMIN - MORPHIN ANESTHESIA. — *McClure's Magazine* for June contains a sensational account of the use of scopolamin-morphin in anesthesia as used by Grönig and Gauss at Freiburg. In America the scopolamin-morphin anesthesia has received little attention. It is far from safe and can be carried out only in hospitals. Morphin and scopolamin should not be used in fixed proportions (*Jour. A. M. A.*, June 6, 1914, pp. 1815 and 1829).

GLYCO-HEROIN, SMITH.—A report of the Council on Pharmacy and Chemistry explains that Glyco-Heroin, Smith, although containing 1/16 grain heroin to the teaspoonful, is exploited in a way to encourage self-drugging by the layman. The advertising matter suggests the administration of Glyco-Heroin, Smith, to children and much of it has contained the evident falsehood that this heroin mixture does not produce narcotism or habituation. The possibility of habit formation should be sufficient to induce the thoughtful physician to avoid the use of Glyco-Heroin, Smith (*Jour. A. M. A.*, June 6, 1914, p. 1826).

WINE OF CARDUI.—The Chattanooga Medicine Company claims that no more alcohol is used in Wine of Cardui than is needed to preserve it and that it cannot be used as a beverage. In view of this the terms "booze" and "tipple" cannot be applied to the preparation (*Jour. A. M. A.*, June 6, 1914, p. 1827).

BUFFALO LITHIA WATER.—The fallacy that diseases are due to uric acid and the fallacy that lithium would eliminate the uric acid has made mineral waters highly profitable—even when lithium was present only in infinitesimal amounts. One of the most widely used "lithia waters" was Buffalo Lithia Water, later called Buffalo Lithia Springs Water, which has been declared misbranded by the Federal Courts because it was shown to contain less than does Potomac River water and that a person would have to drink 150,000 to 225,000 gallons of the water to obtain an ordinary dose of lithia. The testimonials certifying to the high

efficiency of Buffalo Lithia Water and its superiority to lithium compounds given in the past by physicians eminent in their profession, certify to the unreliability of clinical observations (*Jour. A. M. A.*, June 13, 1914 p. 1909).

THE ABSORPTION OF IRON.—The belief that organic compounds of iron were superior to inorganic iron salts arose before it was known that the bowel forms the most important channel for the excretion of this element, whence the failure to find an increase in the amount of iron eliminated with the urine by means of the kidneys after ingestion of the element in some form or other was taken as an indication that it had not been absorbed. To-day it is known that iron can be absorbed and excreted by the intestinal wall. Experiments have demonstrated that both inorganic and organic iron can be absorbed and satisfactorily carry out the purposes for which iron is administered (*Jour. A. M. A.*, June 13, 1914, p. 1913).

PROPHYLAXIS OF TETANUS.—The following procedure is advised: Remove every particle of foreign matter from the wound. Dry the wound and treat every part with iodine or cauterize it with a 25 per cent. phenol solution and apply a wet pack saturated with boric acid solution or alcohol. Inject as soon as possible, intravenously or subcutaneously, 1,500 units of antitetanic serum and repeat the injections if indications of possible tetanus arise. In no case close the wound, but allow it to heal by granulation (*Jour. A. M. A.*, June 20, 1914, pp. 1964 and 1971).

BEEF, WINE AND COCA.—This preparation, sold by Sutliff, Case & Co., Peoria, Ill., was claimed to contain about 15 per cent. alcohol and 1/5 of a grain of cocaine to the fluidounce. It was found to contain 23.75 per cent. alcohol by the federal authorities and accordingly declared misbranded by the courts (*Jour. A. M. A.*, June 20, 1914, p. 1981).

MALT NUTRINE.—This product of the Anheuser-Busch Brewing Association was declared misbranded by the government authorities because the label claimed that it was a highly concentrated extract of malt, which was untrue. Malt Nutrine was found to contain 1.6 per cent. alcohol and extravagant therapeutic claims were made for it (*Jour. A. M. A.*, June 20, 1914, p. 1981).

MANADNOCK LITHIA WATER.—While extravagant curative claims were made for this "lithia water" examination showed it to contain only traces of lithia and hence it was declared misbranded under the Food and Drugs Act (*Jour. A. M. A.*, June 20, 1914, p. 1981).

BUCKHORN LITHIA WATER.—This water was declared misbranded by the federal authorities because false curative claims were made for it and because it did not contain enough lithia to be entitled to its name (*Jour. A. M. A.*, June 20, 1914, p. 1981).

SUN-RAY SPARKLING WATER.—While represented to be "the world's purest water," it was water to which sodium chlorid, sodium bicarbonate and carbon dioxide had been added. Accordingly the company which sold the water was found guilty of misbranding under the Food and Drugs Act (*Jour. A. M. A.*, June 20, 1914, p. 1981).

HICCURA MINERAL WATER.—This was declared misbranded because it was not a natural mineral water as claimed (*Jour. A. M. A.*, June 20, 1914, p. 1981).

RAYMOND'S PECTORAL PLASTERS.—These are exploited untruthfully as "positive cures" for whooping cough, bronchitis, etc. (*Jour. A. M. A.*, June 20, 1914, p. 1982).

LIQUID ALBOLENE.—This is a light variety of liquid petrolatum marketed as a proprietary medicine, exploited in an objectionable manner and with more or less misleading claims. It is said to come from Russia and differs from American products in being entirely non-fluorescent—an immaterial difference (*Jour. A. M. A.*, June 27, 1914, p. 2048).

BOOK REVIEWS

PSYCHANALYSIS: ITS THEORIES AND PRACTICAL APPLICATION. By A. A. Brill, Ph.B., M.D., Chief of Clinic of Psychiatry and Clinical Assistant in Neurology, Columbia University Medical School; Chief of the Neurological Department of the Bronx Hospital and Dispensary. Second edition, thoroughly revised. Octavo of 393 pages. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$3.00 net.

Every physician of experience realizes the difficulties involved in treating that large group of cases which manifest the clinical syndromes that are diagnosed as neurasthenia, psychasthenia, hysteria and the so-called "border-line" cases, the neuroses and the mild functional psychoses. Psychoanalysis, the newest system of psychotherapy, is now coming to be recognized as the most successful method of treatment in those cases. It is based on a new system of thought—a new psychology—in the development of which such names as Freud, Bleuler, Breuer, Jung, Hoch, Meyer, Putnam, Brill and others are preeminent. The superiority of this over all other systems of psychotherapy is due to the fact that psychoanalysis deals with the abnormal psychical manifestations as definite entities and treats the individual personality. Like every new system of medical thought it is being vigorously attacked, but a mass of valuable contributions are rapidly being accumulated which indicate beyond all doubt that psychoanalysis is one of the most striking developments in modern medicine. As time goes on more and more will be heard of psychoanalysis and the psychoneuroses, of the psychopathology of every-day life, of the sexual factor in the determination of the symptoms of perverted psychic function, of the significance of dreams and their interpretation, of the Oedipus complex and so on. Sooner or later every physician will have to know something about them. One of the best and most fascinating books on this subject is this new volume by Brill. In this book the entire subject is treated as briefly as such a comprehensive subject can be, and is presented in the admirable manner characteristic of this well-known writer. Any one wishing to learn what there is in psychoanalysis, and what its significance is will find this volume just suited for that particular purpose. The many new additions and the added glossary of psychoanalytic and psychosexual terms help to make this second edition one of the books that every practicing physician should have.

MARRIAGE AND GENETICS. LAWS OF HUMAN BREEDING AND APPLIED EUGENICS. By Charles A. L. Reed, M.D., F.A.C.S., Member and former President of the American Medical Association; Professor in the University of Cincinnati. Cloth, pp. 183. Price, \$1.00. The Galton Press, Publishers, Cincinnati, Ohio.

A most timely and excellent treatise on a subject that has been too long ignored by the American public, and written by one who has built well his foundation for the subject matter presented.

THE MIND REMEDY. By John G. Ryerson, M.D., Boonton, N. J.

This is a quackish book recommending the use of lactose for a very large number of diseases, and even certain congenital conditions. We wonder why the author does not recommend lactose as an embalming agent for use after the patient is dead. About the only thing the book is good for is to make a fire on a cold winter's morning.

A HISTORY OF LARYNGOLOGY AND RHINOLOGY. By Jonathan Wright, M.D., Director of the Department of Laboratories New York Post Graduate School and Hospital, New York City. Second edition, revised and enlarged. 358 pages. Lea and Febiger, Philadelphia and New York, 1914.

This is an exceedingly interesting history of the development of our knowledge of the nose and throat. It has been written by a well-known nose and throat surgeon, whose writings are ever interesting. That the book has found a place in the libraries of a large number of men is indicated by the fact that there is a call for a second edition. The information that is given has been secured at an enormous amount of labor and expense, and indicates, as the author has said, that "our knowledge of laryngology and rhinology has been built up, not by the mushroom activity of any one period, or of any one school of medicine, or by the premature birth of an idea or theory, but by the patient, painstaking, laborious exertions of many generations of earnest men working, for the most part, without expectation or perhaps desire, certainly without the attainment of those rewards by which not only the layman, but alas, even the average number of our own art measures what he calls success. To him who knows the joy of work, this phenomenon needs no explanation. To the rest of mankind no explanation would suffice."

PATHOLOGY, GENERAL AND SPECIAL. A manual for Students and Practitioners. By John Stenhouse, M.A., B.Sc. (Edin.) M.B. (Tor.), formerly demonstrator of pathology, University of Toronto, Canada. Second edition, revised and enlarged; including selected list of State Board Examination Questions. 12 mo, 278 pages, illustrated. Cloth, \$1.00 net. Lea & Febiger, publishers, Philadelphia and New York, 1913.

In this little volume entitled "Pathology" the attempt is made to epitomize into about 250 small pages this vast and comprehensive subject. Such an attempt must be manifestly absurd. The book is said to be intended for students and practitioners, but certainly neither one will find it to be of any scientific or practical value. Quite the contrary, this is just the sort of work that students should be guarded against. It is difficult to understand how there can be a demand for a medical work of this kind.

CLINICAL HEMATOLOGY: AN INTRODUCTION TO THE CLINICAL STUDY OF THE SO-CALLED BLOOD DISEASES AND OF ALLIED DISORDERS. By Gordon R. Ward, M.D., Fellow of the Royal Society of Medicine, Medical Society of London, etc. Octavo of 394 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$3.50 net.

In this volume on "Bedside Hematology" the author submits a clinical study of the so-called essential blood diseases that will be not only of considerable interest but of much practical value to the general physician. The book is intended primarily to serve the needs of

the general physician, and as such it presents the gist of our knowledge of this rather obscure group of clinical entities briefly but quite fully and thoroughly. The subjects of "Status Lymphaticus" and "Addisonian Anemia" in particular are well treated; the chapters dealing with them are brief, clear and to the point. The illustrations are good, and special mention must be made of the excellent microphotographs. An error of omission to be noted is the author's failure to associate the "*Corynebacterium Hodgkini*" with the etiology of Hodgkin's disease.

DIAGNOSIS IN THE OFFICE AND AT THE BEDSIDE. The Use of Symptoms and Physical Signs in the Diagnosis of Diseases. By Hobart Amory Hare, M.D., Professor of Therapeutics, *Materia Medica* and Diagnosis in the Jefferson Medical College of Philadelphia. New (7th) edition, thoroughly revised and rewritten. Octavo, 547 pages, with 164 engravings and 10 full-page plates. Cloth, \$4.00 net. Lea & Febiger, Philadelphia and New York, 1914.

The author has produced a book of great value to the busy general practitioner. The classification of symptoms according to the regions of the body involved serves in giving the reader a clue to the probable cause of the symptoms. In this manner it acts like an index to a system of medicine, that is, in locating the one thing you wish without perusing a lot of unnecessary material for information upon the subject you desire to read. It has always seemed to the writer in reading up a case that if the definition of the disease would come first, then the symptomatology of the disease being described, it would save a lot of time and labor. The fact that Hippocrates and Galen described a disease under some other name in such and such a century, is very interesting, but is of little help to the doctor attempting to arrive at a correct diagnosis of the condition at hand, and is of less help to the patient seeking relief from his disease. The book is well-balanced. The elimination of the section on laboratory diagnosis, thus lessening the size of the volume as well as the price, makes for improvement in the work. The best section in the opinion of the writer is that devoted to the symptoms of the diseases of the nervous system.

MODERN SURGERY: GENERAL AND OPERATIVE. By J. Chalmers DaCosta, M.D., Samuel D. Gross Professor of Surgery, Jefferson Medical College, Philadelphia. Seventh edition, revised, enlarged and reset. Octavo of 1,515 pages with 1,085 illustrations, some of them in colors. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$6.00 net; Half Morocco, \$7.50 net.

This excellent work made its first appearance in 1894 and has now been revised for the sixth time—such a history is almost enough to exclude criticism. A valuable feature of this book is the frequent interpellation of references. Numerous quotations are employed as the author "has tried to keep out of these pages the ornaments of plagiarism." Dr. DaCosta's characteristic style is illustrated in the following quotations: "A functionless part, like a loafer in a city, is a dangerous element, each is a menace. The loafer is apt to become a criminal; the appendix is apt to inflame and kill." "It would be as wise to take a piece out of the dome of a cathedral to increase the stature of the dean and chapter" (as to perform craniotomy for microcephalus).

The opening chapters are devoted to surgical pathology and are, for the most part, excellent. The chapter on bacteriology could have been omitted without impair-

ing the value of the book. The statement in the chapter on Asepsis that "air which comes from the lungs is germ free, and even a large class will not infect the air by breathing, but will rather help to free it from bacteria" is susceptible to moderation. The sections on gangrene and tetanus are especially good, while the chapter on gunshot wounds is probably the best that can be found in any of the smaller surgical text books. The statement on page 87 that "plethora renders a patient liable to sthenic infections (those characterized by high action)" is not exactly clear to the reviewer.

Dr. Chevalier Jackson wrote the section on tracheo-bronchoscopy and esophagoscopy, and it is, of course, authoritative. In the chapters devoted to the surgery of bones and joints the author follows the teachings of Mr. Jones of Liverpool. He only operates for fractures when he fears that conservative treatment may fail, but he operates as a rule in Pott's fracture.

The scope of the book is almost as comprehensive as is that of a "System" and in the 1515 pages the author has not only considered surgical principles and surgical methods but he has also invaded the domain of other branches of medical science. An example of this invasion is found in the twenty-nine pages devoted to syphilis, and many of the author's statements regarding this topic might be modified with advantage. It is an error to state "salvarsan is not given to a child under 3 years of age." The assertion that "salvarsan is not to be given as a routine treatment of syphilis because it does not cure, and mercury does" is open to question. The author does not seem to be aware of the viewpoint of modern syphilographers that the appearance of hereditary syphilis in a child means that the mother is syphilitic.

A careful review of the book has led to the following criticisms as to points of minor importance:

As much space is devoted to leeching as to the very live topic of bone repair.

It would have been better to have shortened the section describing all the numerous methods of cat-gut preparation and to have lengthened the very short space devoted to drainage.

The modern conservative methods for treating surgical tuberculosis are slighted. Only six lines are devoted to the consideration of heliotherapy and the false impression is given that one should start with an exposure of the whole body to the sun's rays. The important work of Wilms and Iselin in the field of Roentgen therapy is ignored.

Cholesteatomata are discussed under fibromata although these tumors are usually dermoids. The fact that the adrenal origin of hypernephromata has been questioned by competent authorities is not mentioned.

No notice is given to the widely accepted belief that congenital deformities and rickets play the predominant role in the etiology of spinal curvature.

Haertel's highly valuable method of injecting the Gasserian ganglion is not described. Modern methods of producing regional anesthesia are not considered. The author is still employing cocaine and using the infiltration method for producing local anesthesia. He claims that hot solutions of cocaine are safer than cold solutions while as a matter of fact Schleich has proven that the reverse is true. Reclus and not Schleich introduced infiltration anesthesia.

Methods for closing the pylorus in connection with a gastro-enterostomy receive no attention.

The alleged relationship between the thymus gland and Grave's disease is likewise ignored.

The author condemns the employment of sutures through the kidney substance in a nephropexy but does not describe the methods of fixing the kidney by means of free transplants of fascia.

Taken altogether this book is probably the best one-volume text-book on surgery that we have, and these few criticisms are not made with the idea of lowering the value of the work but they are offered because they serve by contrast to emphasize the many merits of Dr. DaCosta's text-book.

MEDICAL GYNECOLOGY. By S. Wyllis Bandler, M.D., Adjunct Professor of Diseases of Women, New York Post-Graduate Medical School and Hospital. Third Thoroughly Revised Edition. Octavo of 790 pages, with 150 original illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$5.00 net; Half Morocco, \$6.50 net.

The third edition of this book has just been issued. It is well written and well illustrated, the illustrations showing methods of manipulation and how local treatments should be given. Special attention is called to that part of the work which deals with the internal secretions, this being new in this edition and well up to date, especially showing the relation of the internal secretions to gynecological and sexual conditions. The author confines himself to medical treatment and the employment of measures which lie between the use of drugs and the knife. The author is to be congratulated on producing such a practical work.

THE JUNIOR NURSE. By Charlotte A. Brown, R.N., Instructor in the Boston City Hospital; Graduate of the Boston City Hospital and Boston Lying-in Hospital Training Schools for Nurses; late Superintendent of the Hartford Hospital Training School, Hartford, Conn. 12mo, 208 pages, illustrated. Cloth, \$1.50 net. Lea & Febiger, publishers, Philadelphia and New York, 1914.

This little volume should be in the library of every nurse, and should be read by those who contemplate the adoption of nursing as a profession. It is full of information for the beginner and should be kept as a reference book by the graduate. It is clear and concise, and characterized by the avoidance of technical terms which might be hard for the beginner to understand.

SURGERY: ITS PRINCIPLES AND PRACTICE. FOR STUDENTS AND PRACTITIONERS. By Astley Paston Cooper Ashhurst, A.B., M.D., F.A.C.S., Instructor in Surgery in the University of Pennsylvania; Associate Surgeon to the Episcopal Hospital; Assistant Surgeon to the Philadelphia Orthopedic Hospital and Infirmary for Nervous Diseases. Handsome large octavo, 1,141 pages, with 7 colored plates and 1,032 illustrations, mostly original, in the text. Cloth, \$6.00 net. Lea & Febiger, publishers, Philadelphia and New York, 1914.

Text-books on surgery to-day show a marked advance when compared with those on the same subject published only a comparatively few years ago, and the above is no exception.

As stated in the preface "it is the function of a work such as this to furnish the foundation on which a knowledge of surgery is to be built." The book is therefore very comprehensive when viewed in the light of the number of subjects treated, which includes chapters on orthopedic surgery, gynecology, surgery of the gastro-intestinal tract, surgery of the gall-

bladder, liver, pancreas and spleen, and surgery of the prostate, all of them subjects which merit more extended treatment than can be accorded them in a single volume of 1,140 pages. But bearing in mind the function of such a work as this, namely, to furnish only a foundation, the author is content to recite only the best-known facts relating to the subjects treated. Some descriptions are very terse indeed.

Very little fault can be found with the chapter on appendicitis unless that it is disproportionately long (16 pages). It is, however, a good résumé; the only point at variance with most operators being the transverse incision which he favors because the abdominal nerves run in the direction of this incision and are less likely therefore to be injured. The rectus sheath is often opened, but the muscle never cut because it can be retracted with facility.

The twenty pages devoted to surgery of the stomach and duodenum present the subject in an up-to-date, although concise manner and are well worth study.

A great deal more might be said of this publication but enough has been indicated to give the prospective buyer an idea of its character.

The illustrations are good. Most of them are original and they are numerous enough to be of real value in illustrating the text. They add materially to the value of the work.

A MANUAL OF CLINICAL DIAGNOSIS. By Means of Laboratory Methods. For Students, Hospital Physicians and Practitioners. By Charles E. Simon, B.A., M.D. Eighth edition, enlarged and thoroughly revised. Illustrated with 185 engravings and 25 plates. Lea & Febiger, Philadelphia and New York, 1914.

This eighth edition is fully up to the standard of the previous editions. The arrangement of the book is that inaugurated in the last edition, i. e., the first and larger part deals with the technical points of laboratory diagnosis, the second part with the interpretation of the results of the laboratory findings.

The changes in this edition consist of the new methods and modifications of the older methods which the past two years have shown to be of value in laboratory diagnosis. Along this line may be mentioned the phenol-sulphone-phthalein test of Rowntree & Geraghty, diagnostic reactions depending on the presence of protective ferments (Abderhalden) in the blood, a more nearly standard method for making the Wassermann reaction, and the complement-fixation test for gonococcus infections.

The author justly urges a more careful study of renal cases with laboratory methods by the practitioner, as much useful and practical information is to be gained. It is strange that the author has not given Mulfatti's method of ammonia estimation in place of Folin's, as it is so much more simple.

Part 2, although occupying only about one-third of the volume, deserves special mention as it deals exclusively with laboratory findings that are to be expected in each disease. Under each disease are listed the essential factors, then the changes that occur in the various substances that are susceptible of laboratory examination, such as blood, urine, gastric juice, pus, sputum, feces, cerebrospinal fluid, etc.

The text where necessary is made clear with good illustrations. This is an exceptionally good "Clinical Laboratory Diagnosis."



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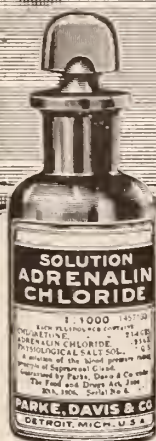
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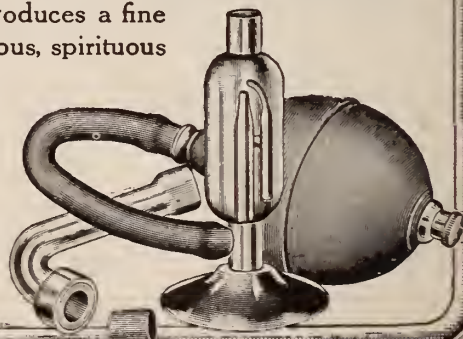
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LOCAL MANIFESTATIONS IN THE EAR, NOSE AND THROAT, ASSOCIATED WITH DISEASE OF THE NER- VOUS SYSTEM *

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Virchow has said: "No specialty can flourish which separates itself completely from the general body of medical science; no specialty can develop usefully and beneficially if it does not remain in relationship with other specialties and drink ever and ever again from the fount of general medical knowledge, thereby preserving for science, even if it should not be necessary for practice, that unity on which the position of specialism intrinsically rests."

Our knowledge of the intimate relationship of pathological conditions of the ear, nose and throat to neurology has progressed rapidly during the past decade but we encounter many baffling conditions in the practice of our specialty which prove that in the field of this relationship there remains much to be explored. Pathologic research and clinical interpretation during the next decade will no doubt lead us to a clearer understanding of many of these doubtful morbid conditions which face us daily.

The elucidation of local manifestations in the ear, nose and throat, associated with disease of the nervous system, becomes both difficult and interesting because many intricate questions in physiologic and pathologic neurology appear along the diagnostic horizon and often take the otolaryngologist far beyond the field of his specialty. According to Virchow's tenet, he should be able to diagnose these conditions whether he cares to treat them or not.

Pathological conditions in the ear, nose and throat may affect the nervous system through

extension of infection, perverted metabolism and reflex mechanisms, the latter particularly meriting our closest scrutiny. The extension of infection from the upper respiratory tract to the brain and its coverings via the accessory sinuses, ears and mastoid cells is so well known as to elicit merely a comment to recall it to view.

Nasal obstruction, it matters not whether it lies in hypertrophied turbinates, enlarged tonsils, adenoid vegetations, deviated septa, affections of the accessory sinuses, or in the intranasal congestions which accompany mouth-breathing, easily perverts the chemistry of metabolism, producing poisons which exert a profound influence on the nervous system. Ziegler names suboxidation, the result of nasal obstruction, as the most important factor in perverted metabolism which may give rise to a variety of pathologic conditions of the nervous system, chief among which are neuritis, neuralgia, mental hebetude, etc.

Citelli (Caton) contends that he has found changes within the central hypophysis in cases of children with obstruction from adenoids and tonsils, and to this associated condition in the hypophysis he attributes the psychic symptom complex such as lack of attention (aproxexia), stupor, etc., exhibited in such cases.

Sendziak (*Journal of Laryngology*, August, 1912) quotes Bohme, Stoka, Jonas and Stasinski in maintaining a correlation of the sympathetic fibers of the nasal mucosa on the thyroid gland, itself a powerful factor in the chemistry of metabolism. There exists in the upper respiratory tract and ears a complicated network of sensory, motor and sympathetic nerve fibers, each one a possible side track for short circuiting or deflecting nerve impulses to areas remote from the original causative lesion. This network composed of the fifth, seventh, eighth, ninth, tenth and eleventh pairs of cranial nerves is further complicated by their central connections in the brain proper, some of which are well known while others form food for research, theory and specu-

* Read before the Indiana State Medical Association at West Baden, September, 1913.

lation. The trifacial nerve with its four ganglia, ciliary, sphenopalatine, otic and submaxillary, forms the greater part of the nerve structure of the nose. The ophthalmic and superior maxillary branches are sensory and connect with the ciliary and sphenopalatine ganglia. The inferior maxillary is a mixed nerve and connects with the otic and submaxillary ganglia. The communications between these nerves and ganglia are further augmented by connections with the cavernous and carotid plexuses of the sympathetic system. To further complicate this network of reflex paths, Meckel's ganglion, itself a Pandora's box, is connected with the facial nerve and its geniculate ganglion through the Vidian nerve which is composed of the great superficial petrosal and deep petrosal, the latter a branch of the carotid plexus. From the sphenopalatine ganglion branches go to the ethmoid and sphenoid cells, eustachian tubes, the turbinates, septum, palate and pharynx. The otic ganglion derives its motor supply from the facial nerve through the small superficial petrosal, and its sensory root by a connection with the glossopharyngeal nerve.

Through its tympanic branch or nerve of Jacobson the glossopharyngeal nerve becomes hooked onto this circuit of the fifth nerve and its ganglia, superior maxillary branch of the fifth, glossopharyngeal and pneumogastric to the pharynx, larynx and trachea. To this latter reflex path the pneumogastric is joined by its auricular branch or nerve of Arnold which is distributed to the posterior part of the pinna and external auditory meatus, and the lower part of the membrana tympani. It is well to remember this distribution in cases of vague pain over the mastoid where other evidences of mastoiditis are lacking, especially when the pain is associated with an acute rhinitis. This is also of importance in differentiating myalgia with and without otitis as pointed out by White, Halle and Peritz.

Pressure at various places along this entangled circuitous reflex pathway in the head may give rise to reflex coughs, which are not relieved by sedative local medication. As examples of this it is well to recall the effect of retention of caseous material in tonsillar crypts, pressure of middle turbinates against the nerve of Cotunnus, hypertrophy of lateral pharyngeal bands, enlargement of cervical lymph-nodes, pressure from aneurysm of the aorta, etc. The latter, however, by pressure on the recurrent laryngeal is more likely to be associated with changes in the patient's voice than reflex cough.

Having reviewed the peripheral distribution and connections of the cranial nerves in the ear,

nose and throat, a short consideration of the central connections will be of profit. The nuclei of the fifth, seventh, eighth, ninth, tenth and eleventh pairs of cranial nerves, whose peripheral distributions and connections we have considered, are located in the pons and medulla, the so-called brain stem, and for description may be grouped as follows: the caudal group including the ninth, tenth and eleventh pairs; the cerebello pontine angle group, the seventh and eighth pairs and the trifacial. The exact location of these nuclei and their relationship I shall not describe, as such may be obtained in any text-book of anatomy.

The clinical symptomatology of nuclear and supranuclear lesions of the cranial nerves mentioned should be of considerable interest to the otolaryngologist. The vagus, being a mixed nerve, supplies the muscles of the palate, pharynx, larynx, trachea, bronchi, esophagus, stomach and small intestines with motor fibers, sends inhibitory fibers to the heart and vasomotor fibers to numerous blood-vessels. It supplies sensation to the dura mater, external auditory meatus, pharynx, larynx, bronchi, esophagus and stomach. In these organs terminate the fibers from the ganglion of the root and of the trunk of the vagus, which are regarded as analogues of the ganglia of the spinal nerves. A lesion involving both vagi centrally has no symptomatology, as such means instant death. We may, however, have a partial bilateral and complete unilateral paralysis of the vagus leading to unilateral paralysis of the palate, pharynx and larynx, either with or without changes in the voice owing to the degree of compensation on the part of the other vocal cord. Interference with deglutition is of no significance in consequence of the fact that the fibers of the pharyngeal muscles of one side interlace with those of the other. We may have the so-called "posticus paralysis" involving the cricoarytenoideus posticus interfering with respiration, especially when bilateral.

The glossopharyngeal nerve being almost exclusively sensory, with cells situated in the superior and petrous ganglia only, has a small motor portion credited to it which supplies the stylopharyngeus muscle which is of no practical clinical importance. Loss of taste in the posterior one-third of the tongue is the most important symptom of interruption of this nerve. The abolition of the pharyngeal and palatal reflexes are only of importance clinically when unilateral because bilateral abolition of these reflexes occurs in purely functional conditions. Irritative lesions in the region of the caudal nerves are of little importance for localization because they result

in such symptoms as pharyngismus, laryngismus, esophagismus, etc., which are more often associated with functional nervous diseases. On account of this relation it becomes all the more important to determine whether a lesion is supranuclear, nuclear or infranuclear. Generally speaking supranuclear lesions are characterized by spasticity and the absence of degenerative atrophy and the reaction of degeneration. Unilateral interruptions in the supranuclear tracts of the caudal group produce no demonstrable changes because their corticobulbar innervation is a bilateral one. Thus, in cerebral hemiplegias we have so little disturbance in the functions of the sternomastoid, glottis and mechanism of deglutition. A bilateral interruption of these tracts produces the so-called pseudobulbar palsy with impairment of motor functions of the pharynx, larynx and tongue. The nuclear paralyses of the caudal group of nerves are characterized by flaccidity and reaction of degeneration with degenerative atrophy in the muscles affected.

In dealing with the nuclear and supranuclear lesions of the nerves of the cerebello pontine angle, the seventh and eighth pairs, much must be left for inference. If we have a nerve deafness we can only infer an affection of the auditory trunk when accompanying symptoms point to a morbid basal process. A simultaneous affection of the vestibular nerve would in all probability accompany such a case, revealing itself by phenomena of the nature of vertigo, nystagmus and disturbances of equilibrium. The facial and other cranial nerves, especially the sixth, may be involved along with symptoms referable to the whole brain stem and cerebellum.

Owing to the widespread function of the trifacial nerve a detailed review of its central connections would be in order. The cells of origin of the fibers of the sensory root are located in the Gasserian ganglion. Part of these fibers terminate in one of the sensory nuclei, locus coeruleus, and part make their way downward in the brain stem, giving off as they proceed terminals which enter the nuclear column known as the substantia gelatinosa. From these two sensory nuclei, locus coeruleus and substantia gelatinosa, the trigeminal neuron tracts of the second order pass across the middle line to the fillet of the opposite side in which they pass to the optic thalamus described by Head and Holmes (*Brain*, 1911, p. 102) as the great switching station of all sensory paths. From here a tertiary system of fibers proceeds to the cortical center of the trifacial. The supranuclear or corticopontine innervation like those of the other cranial nerves in the brain stem is a bilateral one.

A destructive lesion in the path of one of the three branches leads to anesthesia of the structures supplied by that branch, but these are not of much significance unless unilateral, because the same condition is found in the functional neuroses. The trigeminus acts also as a nerve of special sense by virtue of one of the branches of the mandibular, the lingual, which carries taste sensation from the anterior two-thirds of the tongue. These fibers pass with the chorda tympani to join the facial nerve trunk, leaving it again to rejoin the fifth nerve through the sphenopalatine ganglion, and with fibers of the maxillary branch pass into the Gasserian ganglion and thence to the nuclei of the fifth in the brain stem.

The structures innervated by the motor branch of the trifacial which are of interest to us are the muscles of mastication. A unilateral lesion involving the motor branch results in a unilateral paralysis of these muscles and lateral movement of the lower jaw is only possible toward the paralyzed side because only the pterygoids on the sound side act. In a bilateral paralysis there is no lateral movement, and the jaw drops with abolition of the mandibular reflex.

Irritative lesions in the sensory sphere produce pain, hyperesthesia and anesthesia dolorosa, but these lose their localizing importance because of the frequency of the neuralgias, regardless of the fact that absence of neuralgiform phenomena in central affections of the fifth nerve deserves special mention.

In the motor sphere irritative lesions are productive of tonic and clonic spasms of the muscles of mastication. The localizing significance of these phenomena is again diminished by the fact of the association of these phenomena with the functional neuroses and infectious processes such as tetanus and meningitis.

Nuclear trifacial affections are generally associated in a typical manner with evidences of lesions of other nuclei in the brain stem. Lesions in the medulla proper will alter the functions of the fifth nerve by involving the substantia gelatinosa or the spinal root of the nerve and, as a rule, will have associated with them evidence of involvement of the other nuclei and nerve roots of the medulla, giving a clue to the caudal location of the disturbance. Nuclear trigeminal anesthetics may present localizing conditions distinguishing them from those of a peripheral nature when the most distal part of the substantia gelatinosa of the medulla is affected, just as with spinal sensory nerves. In such a

case disturbance of sensation is noted in the frontal region. If the lesion is somewhat higher up the temples and eyelids become involved, whereas a lesion still higher will affect the nose and cheeks.

In regard to supranuclear lesions of the tri-facial, they produce if unilateral no motor but only sensory symptoms because of the bilateral cortical innervation of the masticatory nuclei.

Owing to the bilateral cortical innervation of the muscles of mastication and deglutition and the larynx, cortical localization presents little of interest for the otolaryngologist.

In regard to the anarthrias and aphasias the whole question of cerebral localization still remains deeply entangled owing to the frequent difficulty of correctly interpreting lesions and of accurately comparing the clinical and pathologic findings in different cases. The otolaryngologist is often consulted by patients with local symptoms in the ear, nose and throat which are early signs of grave organic disease of the nervous system.

Brain tumors located below the tentorium may produce disturbance of function in the nerves of the brain stem resulting in nerve deafness, bulbar palsy, etc. Areas of softening due to thrombosis and embolism may occur in the left temporal lobe as well as abscess and produce the symptom complex of motor aphasia. Good has published an interesting case of chronic bulbar palsy which consulted him because of difficulty in speech and a complaint of a feeling of fullness and difficulty in swallowing. In such cases, the difficulty of speech usually affects the labials and gutturals owing to the atrophic paralysis of the tongue and weakness of the lips which are usually thinner than normal. Later in the disease there may be an involvement of the larynx, shown by adductor paralysis. These same symptoms are seen at times in the late stages of amyotrophic lateral sclerosis associated with spastic conditions of the lower jaw and sometimes the throat. In the pseudobulbar paralysis mentioned as due to a bilateral supranuclear lesion associated with cerebral arteriosclerosis, we may have the same difficulty in speech and deglutition as in bulbar palsy but the paralysis is a spastic one and the case usually gives a history of repeated apoplectic strokes while there is absence of atrophy of the structures affected.

Locomotor ataxia, multiple sclerosis and paralysis agitans very frequently show disturbances in function in the ear, nose and throat. A gradual increase in the loss of hearing may be an early symptom of locomotor ataxia (Camp). A uni-

lateral abductor paralysis of the larynx is quoted by Ross as being an early sign of tabes dorsalis. The paralyses in tabes are usually of a variable and transitory character. The crisis tendency of tabes is shown in the so-called laryngeal and nasal crises, the former consisting of severe inspiratory stridor, dyspnea and cyanosis. Klippel and Lhermitte call attention to the differential and prognostic value of the occasional phenomena in the sphere of the sense of smell and of nasal secretion which are instructive symptoms in incipient tabes. They describe a number of typical examples of various forms of these tabetic nasal crises. The patient may suddenly experience a tickling in the nose followed by the sensation of the smell of fish or rotten eggs, or the spasm may occur with only the odor and taste in the mouth, with excessive flow of saliva, or secretion from the nose. In some cases the crisis may be accompanied by sneezing or a spasmodic cough, with lacrimation and rhinorrhea. The disturbances indicate a process affecting and destroying the olfactory tract and trigeminal nerve.

One of the Charcot's triad in typical multiple sclerosis, the scanning speech, is well known, but the method of its production is not understood. Rethi claims that the intention tremor may also affect the vocal cords, giving rise to a peculiar tremulo in the voice. Nerve deafness and infrequently symptoms of bulbar palsy are associated with insular sclerosis.

Graeffner, in studying the behavior of the larynx in paralysis agitans, found that the vocal cords or the entire larynx vibrate in the time of the general tremor in 26.25 per cent. of the cases. In 33.75 per cent. they vibrate at a time different from that of the general tremor, and in 40 per cent. of the cases he found absence of real tremor of the cords.

We know that the turbinates are extremely vascular organs, subject to marked and rapid changes in their vascularity, and that these changes are under the control of the so-called vasomotor nerves of the sympathetic system. The work of Bidder and Volkman shows that the sensory nerves of the nose are accompanied by a large number of fine sympathetic fibers, frequently five to ten times as many as the cerebrospinal nerves. Buch contends that the sympathetic fibers are sensitive only when congested.

Our lack of knowledge of the exact physiologic function of the sympathetic system leaves much to be desired. Richardson has written of the vasomotor type of disturbance in the nose, contending that the seat of these affections is not

primarily in the turbinal tissue but rather in the central nervous system, resulting in a disturbed stability of the bulbar center, with relaxation of the vasomotor control of the mucosa of the upper air tract. The conditions seem to be associated with neurasthenia, the central and sympathetic nervous systems being in a state of readiness to be excited with responses of a tumultuous nature exhibited in the nasal mucosa. The resulting obstruction produces headache, pain and tightness at the root of the nose, rhinorrhea, mental dulness or asthenia and neuroses of olfaction.

Since Beard first suggested the term neurasthenia, the symptom complex implied by that title has undergone repeated dismemberment until, at the present time, if one starts down the diagnostic stream of functional nervous diseases he must choose as his craft one of the various classifications offered. It is held by many that neurasthenia is not an entity but rather a symptom complex, an expression of fatigue or exhaustion of the entire nervous system and its appendages. It is usually acquired, but there exists another form dependent on heredity, which is termed psychasthenia. Symptoms in both are subject to but little variation, save in intensity and duration, neurasthenia being amenable to cure, psychasthenia not.

Freud divides neurasthenia into the true and psychoneuroses; the former including true neurasthenia and anxiety neurosis, the latter hysteria and the obsessional neurosis. Regardless of classification the rôle played by these neuroses is an important one. Definitions become difficult because of the multiform character of the symptoms presented. An extensive literature has grown up around these functional conditions, far too extensive for even a superficial consideration in a paper of this scope. Camp, in a series of 200 tabulated cases of neurasthenia found symptoms referable to the ear, nose and throat in 30 per cent. of the cases. Voss, in a series of forty cases of hysteria found very interesting symptoms referable to the ears. The symptoms could be explained either on the basis of fatigue or excessive irritability of the function involved. We may have an impairment of hearing, which by careful tests shows it to be due to a gradual fatigue and lowered attention similar to the spiral visual field found in neurasthenia. In contradistinction to this diminished hearing we may find an excessive irritability of the auditory nerve in which ordinary sounds become painful to the patient.

In considering hysteria, no matter whose definition is accepted, either that of Babinski, Janet, Freud, etc., one is struck by the protean character of the symptoms presented, in fact they may simulate almost any organic condition. Janet considered the manifestation of psychasthenia rare before the age of eight, yet we know hysteria to exist frequently in children, showing itself especially in the form of tics and spasms, these being often confused with chorea, when the symptoms are of psychogenetic origin. Williams, in the *Journal of Abnormal Psychology*, February-March, 1913, calls attention to the importance of the recognition and proper treatment of these conditions.

In the diagnosis of our cases we must hew along the border line of the organic and functional conditions, giving to each their proper consideration. Many baffling conditions must be studied along the anatomic, physiologic, pathologic and psychologic lines herein suggested. To treat local manifestations of a disordered nervous system as a local disease can only end disastrously, particularly is this true when the symptoms are psychically conditioned. It is high time that the word "nervous" as ordinarily used in diagnosis be relegated to the scrap heap. We should attempt to determine more accurately whether a symptom has an organic or a functional etiology, and the appropriate treatment applied. Psychotherapy rationally applied is often of eminently practical importance to the otolaryngologist, and when associated with the education of the patient offers more permanently satisfactory results than any other form of treatment. Along these lines the works of Janet, Freud, Du Bois and Jung offer much which will be of great assistance.

DISCUSSION

DR. D. W. STEVENSON, Richmond: There are a great many conditions in the ear, nose and throat that have to do with nervous troubles. Indeed, I believe that we all make mistakes when we attend so much to the physical. A great many of our patients need more brain food and mental care than they do cautery cure. I really think that if we would ask our patients what their worries are, we would come nearer the true cause. A woman came to my office the other day with a regular tale of woe about ringing in her ears, and I said, "What are you worrying about?" In former years I did not do that, but would just go ahead with the treatment. This woman began to tell me about her worries, and I told her that she must quit worrying before it would be possible for me to help her. And I believe she is trying, and that will help her more than the treatment.

I had a young woman come to my office not long ago, just for ringing in the ears, and I went ahead and treated her and did not ask questions about her mental troubles. She is now in the sanatorium. She has a form of depressive melancholia. She is going insane.

I think in many cases we would be wise if we did find out the worries of people. I know that generally you don't ask about those things in your office, but I think it would be better. If you can keep people from worrying, having forebodings and regrets, a great deal more eye trouble will be relieved. Yesterday we heard a good deal about the effect of a weak cylinder, but the loss of a husband—that would be ten times more harmful than a quarter cylinder too much or too little. Psychoneurosis—I believe every ear, nose and throat specialist is not well read unless he studies this great subject that has to do with our mentality. The things that hurt us in this life, that hurt our patients, are not our enemies on the outside; our opinions are our enemies, and our diseases. I have had patients say they could not get a bit of air through the nose, and you find only a dry atrophic catarrh. The trouble was in the head and brain. I know that sometimes subjective symptoms do come from atrophic catarrh. They don't feel the passage of the oxygen that we do just because the nose is dry. But these patients had a delusion, and that was the thing that really caused the trouble.

I have had patients come into my office in fear and trembling, saying that they were afraid I would say they had consumption because they had a little dropping in the throat, and I told them that even the doctor himself probably has a little dropping in the throat. I believe it should be the purpose of the doctor to shield the patients, to cheer them up and reeducate them, as the doctor here has well mentioned, in regard to some of their symptoms. I tell you, a doctor practicing medicine without taking the mentality of the patient into consideration is not a good doctor.

Dr. L. D. BROSE, Evansville: Of the spinal and cerebral diseases in which speech and hearing disturbances are found, we will first mention locomotor ataxia. In it we meet with two kinds of laryngeal symptoms, those due to spasmodic contraction of the laryngeal muscles and those due to paralysis of these muscles. The term ataxic laryngeal crises means an expression of paresthesia in the larynx, such as burning or tickling, followed by paroxysmal cough much like that of whooping-cough, or instead of cough, phonatory laryngospasm. In either instance the attack may be attended with loss of consciousness and even asphyxia. Such attacks may repeat themselves a number of times during the day, or a single attack may be followed by a period

of freedom for months or years. The paralytic manifestations may be unilateral or bilateral and involve a single or all of the intrinsic laryngeal muscles. When but a single posticus is paralyzed, the loss in function may not disturb the patient, but if both of these muscles are involved, grave symptoms of persistent dyspnea occur. Affections of speech have been reported in multiple cerebrospinal sclerosis, syringomyelia, in both true and pseudobulbar paralysis. It has been my experience to meet with a case of paralysis agitans where for many years the patient was unable to converse because of unintelligible speech, the result of tremor, and incoordination of the phonatory muscles. Among the organic intracranial lesions we mention embolism, hemorrhages, foci of softening, abscess, tumors and syphilis. The cases of disturbance in the organs of speech, smell and hearing due to tumors at the base of the brain are rare, and those in my own practice were extradural growths, and also involved the eye, so that the diagnosis was not difficult. The localization of a center within the cerebrum for movements of the weak cords remains in dispute, so that the diagnostic importance of such palsies possesses but limited regional value. Ear disturbances in locomotor ataxia result from extension of the sclerotic process to the nerve itself, or to its nuclei. A permanent increased electric excitability in the auditory nerve is indicative of intracranial involvement, if peripheral irritation is excluded. Bone conduction of sound is apt to remain until almost total atrophy of the nerve fibers. Because each auditory center receives fibers from the labyrinth of both ears, it would require a bilateral lesion to produce absolute deafness on the one side. The symptom most characteristic of cortical lesion is word deafness and hallucinations. The latter is a subjective phenomenon, where voices or maybe musical selections are heard. Disturbances in equilibrium with nausea point to lesion in the small brain or nerve trunk. Of the pure neuroses, neurasthenia and hysteria are oftenest met. Hysteria presents a clinical picture of many varieties, but with marked preference for the voluntary functions. The sensory disturbances are those of anesthesia, hyperesthesia and paresthesia. Special sense of smell disturbances may assume the form of hyperosmia, hyposmia and parosmia. Of hearing disturbances, we have diminished or increased sensibility of the auditory nerve. The hearing may be greatly increased on one side and diminished or completely lost on the other. By help of the magnet the disturbance at times may be reversed in the two ears. Characteristic of hysterical deafness is a uniform loss of perceptive power for all tones. Hysterical motor disturbances are purely of coordination, there being no true paralysis, but an inability to perform muscular movement in such

a way as to produce the desired effect. We may have spasm or a picture of paralysis. Associated loss of power in the two laryngeal adductors strongly indicates hysteria. The history of the case is of importance, the loss of voice or hearing occurring suddenly, with a record of perhaps previous similar attacks in a person of highly nervous temperament. Recently remarkable cures have been reported in cases of hysteria, neurasthenia and compulsion neurosis through psychoanalysis. Before resorting to this method one should satisfy one's self whether the etiologic factor is traceable to some sexual experience of childhood, since cases arising from overwork, exhaustive exertion or anxiety or insomnia are not good subjects for this treatment. I do not believe many of us will agree with Freud's dictum that no neurosis is possible in a normal *vita sexualis*. Neurasthenia has been styled the American disease because Beard was one of the earliest to recognize and describe it, but no one has yet shown that we Americans are less normally constituted in our sexual organization than our European brethren. The cure is the result of the psychic elaboration accomplished during a long period of treatment. The former value of the person is not to be overlooked in the disease and treatment should be refused a patient who does not possess a certain degree of education, and whose character is not in a measure reliable. Neuropathic degenerates are not subjects for this treatment, nor those who are not prompted by their own suffering, but subject themselves solely by order of their relatives to it. Hysterical symptoms like neuralgia, paralysis and epileptiform attacks may be traced to psychic traumata which the patient cannot consciously recall, but which can be demonstrated when he is put in the hypnotic state. However, every person cannot be hypnotized. The hysteric suffers from reminiscences, which is proved by the fact that the individual hysterical symptoms disappear without returning, if one succeeded in thoroughly awakening the memories of the casual process with its accompanying effects, and if the patient is circumstantially discussed, the process giving free play to the effect. The reason for the strangulation of the emotion was because at the time of its occurrence it could not be adequately worked off. Freud, in tracing the psychic traumata which are supposed to be at the basis of hysterical symptoms, invariably found them connected with sexual experiences of childhood. In more than half of the severe cases treated by him by psychotherapy, he demonstrated syphilis in the fathers before marriage. The patients showed no sign of hereditary taint, and he considers the abnormal sexual constitution as the offshoot of luetic heredity. Dreams have a definite meaning when analyzed and are most valu-

able for penetrating the mind. A dream may be defined as the result of psychic streams of contrary tendencies, each striving for expression, the ultimate outcome being a compromise between the two. The dream represents the fulfillment of a wish that has reference to the origin of the neurosis. Persons subject to nightmare or who have anxiety dreams, according to Brill, usually suffer from lack of sexual gratification. In dream analysis the dagger and asparagus are symbolic of the penis. The entire subject of psychoanalysis is truly a complex one, one that requires a knowledge of psychology, and hence is most successfully practiced by those who make it a special study. In talking, the past summer, with a professor of mental diseases in one of our best universities, he was far from agreeing with Freud, and gave it as his opinion that Freud was suffering with senility.

DR. HEITGER (closing the discussion): There is probably nothing that shows the effect of fear on the nervous system more than the work of Dr. Crile of Cleveland, on anoci-association, which I will explain a little in detail. Dr. Crile, of course, is a general surgeon and has been a pioneer in the work of surgical shock. He has done more work in this line than anyone else in this country. He has shown that even though the patient is under the anesthetic, the subconscious mind is still active. If it were not so, the patient would die. As long as that subconscious mind is active, impulses are going up along the nerve tracts, just the same, using up the neuron material of those cells and fatiguing them. If there has been a great deal of damage and shock, and if there has been a great deal of fatigue of the brain, when that patient recovers from the anesthetic he will show various degrees of shock. It is simply the functions, and particularly the functions of vegetation, that control the vital functions of the body, that are disturbed. If disturbed to a great extent, the patient will die. In order to obviate that, Crile uses a local anesthetic in the skin and deeper tissues—novocain—in addition to the general anesthetic. His patients rest, have none of the after-pains—ileus and all other different disturbing conditions that patients show when he does not do that, and he has coined the term simply from protecting the brain—anoci-association. If those things are true of the sympathetic system of the abdomen and other parts of the body they are just as true of the sympathetic system of the head, and I think that in the future a great deal of work will be done in the avoidance of this so-called fainting in patients on whom we operate, which is entirely a psychic condition.

In the case cited by Dr. Stevenson, in which the complaint was of not being able to breathe through the nose, while the nostrils were wide

open, but with a condition of atrophy of the tissues, this was probably due to anesthesia. But whether due to an organic basis or whether due to a psychoneurotic basis, I cannot tell. The patients did not feel the air going through the nose.

Regarding the tinnitus, mentioned also by Dr. Stevenson, some of these cases are undoubtedly due to a general condition, which should be cleared up.

I want to again mention one thing which was referred to by Dr. Brose, namely, the possibility of unilateral paralysis of the vocal cord in cases in which there is absolutely no symptom, so far as the function of the voice is concerned. The patient does not know he has the condition at all, and it is only elicited by careful examination. Ross of Montreal, in the *Annals of Rhinology, Otology and Laryngology*, reports three cases in which the patients afterward developed tabes.

In regard to the work of Freud, like everything else new and revolutionary that is brought up in medicine and surgery, it will have its champions and likewise its antagonists. One can say, after a careful, unprejudiced consideration of his writings, that men who have had the most to do with the careful study of Freud's work are inclined to believe in the theory which he claims to have established. As Dr. Putnam of Boston says: "A great many people who attempt psychanalysis do not know enough about psychology, either normal or abnormal, to carry it out." Of course, there are two sides to the question, and it is a question which is opening up a field which has been neglected, and because of this neglect a number of cults and sects have sprung up, and to my mind the doctor, regardless of who he is, who looks at only the physical side of the patient is just as narrow as the Christian Scientist who pays absolutely no attention to the physical.

STRICTURE OF THE MALE URETHRA

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Stricture of the male urethra is the most important of the diseases of the genito-urinary tract, not only on account of its extreme frequency—its special cause affecting sooner or later a large proportion of men—but also because of its important relations to organs more vital than the urethra.

Stricture of the urethra is an abnormal diminution of its caliber, temporary or permanent. In this paper, I wish to say a few things about the spasmodic and the organic or fibrous stricture.

SPASMODIC STRICTURE

The main causes of spasmodic stricture are gonorrheal urethritis, urethral injury, debauches, bad colds, drugs and mental emotion. Instrumentation of a sensitive canal, especially if organic diseases exist, is likely to develop spasmodic stricture lasting for several days. The urinary flow may be greatly lessened during gonorrhea, and then suddenly get complete retention, and without extension of the inflammation to deep urethra or bladder. This is due to spasmodic stricture. Most retention under these conditions is due to extension into the deep urethra, but they are not so sudden and are preceded by symptoms from prostate or bladder.

I had a case of a young physician from out of town who had contracted acute gonorrhea, which he had treated for two weeks. He called on the girl he expected to marry on Sunday night, and on Monday morning had acute retention of urine, which he temporarily relieved by use of catheter. He had a spasmodic stricture, which lasted five or six days, caused by inflammation due to ungratified sexual desire. Spasmodic stricture is temporary and yields to medical measures. All permanent interference with urination or passage of instruments must have an organic cause or depend on intravesical growths, enlarged prostate or organic strictures.

Diagnosis.—Diagnosis of spasmodic stricture is best made with bulbus bougie. For instance, we often have either a congenital or acquired stricture at the meatus and find on introduction of an instrument it is very painful, if the instrument is passed on down into the posterior urethra we often find an obstruction. This may be spasmodic stricture due to reflex irritation caused by the stricture of the meatus, or may be an organic stricture.

The diagnosis by using a smooth steel sound is doubtful, because even a good-sized sound will often pass through the stricture with gentle pressure. A bulbous bougie is a flexible instrument with a sharp shoulder, that comes in contact with the stricture. If you get a resistance to the bougie on introduction, with pressure it will pass on into the bladder. On withdrawing bougie, the organic stricture grasps it tightly, then with gentle force it comes through with a sudden jerk or snap, which is characteristic. If it is a spasmodic stricture, while it obstructs, yet by using gentle pressure it passes through smoothly. By removing the stricture at the meatus, the spasmodic stricture will disappear. It is thus seen that a comparatively small bulbous

bougie may detect an organic stricture together with a spasmodic stricture in deep urethra, where a steel sound of considerable size would fail.

ORGANIC STRICTURE

Organic or fibrous stricture occurs most frequently between the ages of twenty and forty-five, as this is the period of life that urethritis is most likely to occur. Organic stricture is a hard fibrous scar tissue due to inflammation. There are mainly three varieties of organic stricture, the simple linear which produces an obstruction much like that created by tying a narrow cord about the canal. The annular is wider and similar to that which would result by tying a piece of tape about the urethra. The third is the tortuous stricture, which involves a considerable extent of the urethra in an irregular contraction, narrower in some places than others.

I have found stricture to occur most frequently at the meatus or close to it, next at the bulbo-membranous junction.

Etiology.—The most frequent cause of stricture is urethritis. Some think it due more to the duration of the disease than to acute inflammation, but while stricture is generally associated with chronic urethritis, I believe that virulent inflammation is the cause of the stricture, and the stricture gives the symptoms of chronic urethritis. The urethra is seldom in a normal condition after a case of virulent gonorrhea, and practically never if he has repeated infections, for the first one generally leaves damaged spots in the mucous membrane, which sooner or later are likely to form a stricture. Injuries to the perineum which were thought nothing of at the time and long forgotten, are often the cause of the very worst form of stricture.

I recently had a case of traumatic stricture, probably due to a kick in the perineum twenty-seven years before. He had never had an infection. The only symptoms were a slight mucus discharge and frequent urination, yet on examination I found nearly an impassable stricture. I had a hard time to convince him that he had stricture, although I could only get through it with a very small filiform.

Strictures at and near the meatus are often due to chancre and chancroid. Bad instrumentation is often the cause of stricture as well as strong urethral injections. Although the physician may be responsible for stricture occasionally, yet I think the majority of strictures are due to lack of rest, sexual indulgence and self-treatment by the patient. The counter prescribing by drug-

gists is often the cause. There is no disease with which the counter prescriber takes so many liberties as with gonorrhea, and the results are usually disastrous.

The diagnosis of stricture is made by the bulbous bougie and not sounds.

Treatment.—As to treatment, gradual dilatation is the only treatment in most cases. When the stricture is very irritable and tight, they often will not respond to dilatation and are very painful every time treated. These strictures often are resilient and contract down and recur from the slightest cause. I believe these strictures cannot be cured by dilatation, but only by cutting. If they are in the anterior urethra an internal urethrotomy should be the treatment. If this same irritable stricture is in the posterior urethra and is closed down so that you can only get a small filiform through, I believe it is much safer and the chances for a cure are better, if you do an external urethrotomy. For, if you do the anterior urethrotomy and do not cut the entire scar you will nearly always get a recurrence, not mentioning the danger of hemorrhage, extravasation of urine, fistula or death.

I know that most men teach us to do the internal urethrotomy combined with divulsion, even in these bad posterior strictures, but it seems to me to be much safer to do the open, in preference to a blind operation, and the danger of false passage of instruments and trouble will be avoided.

Sudden divulsion of stricture even under general anesthesia, I believe, should be a thing of the past as the dangers are too great, and often the stricture will contract down to its original size within a very few weeks. All surgical treatment may fail altogether unless we pay careful attention to the general management of the case.

We often have cases come to us when the patient is healthy and young, and has no symptoms except burning and frequent urination, yet we find he has a stricture impassable to a No. 14 or 15 French. This patient often will react perfectly to strong treatment, and have no trouble. A rheumatic or syphilitic patient may come, and while the treatment causes little trouble, yet the cure is very slow and discouraging. A cachetic or neurotic patient may come with a stricture of wide caliber, yet give the worst symptoms.

Pain and spasms may be caused by every attempt at dilatation, which is often followed by chills and fever. Only with the most careful

general management of this case can we hope to get good results.

Alkalies should be given to neutralize the urine. If cystitis exists urotropin, oil of eucalyptus or the salicylates are beneficial. Only moderate exercise should be taken. If a hot sitz-bath each night and a hot rectal injection are used, it will often relieve the congestion and irritability of the stricture. It is well to give this patient morphin before each treatment as well as cocaineize the urethra, and follow with an irrigation of hot permanganate solution.

Diet, temperate habits, sexual moderation and avoidance of cold and wet, especially chilling of feet and legs, are important. There is very little chance to have a bladder or kidney trouble if the drainage is perfect; for instance, it has been shown that you may inject the staphylococcus or even the gonococcus into a healthy bladder, and if the drainage is perfect, you will have no complications, but if you tie off the urethra for ten or twelve hours, you not only have a bladder infection, but often find the germs up in the pelvis of the kidneys. Stricture acts in a very similar manner unless treated early.

Before I close I want to say that stricture, with its many complications, probably causes more deaths than syphilis, and the best means of avoiding this condition is by preventative treatment. I believe complicated stricture is much less frequent than formerly, as people are better educated to treating and do not let their condition exist so long. If we will make more careful examinations and treat cases of urethritis with more patience, we will seldom be troubled in the future with bad strictures.

TINTED OPERATING ROOMS

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Several years ago the writer discontinued the use of varnish, enamel and gloss paints of all kinds in the operating-room of the hospital with which he is identified.

It is really remarkable that the handicap of light glare has been borne so long. No matter how strong or perfect one's vision may be, the sharp sunlight reflected from glistening white walls must harass the eyes, at any rate for a brief period after entering the room.

Alexis Carrel recently called attention to the temporary impairment of vision resulting from

the use of white laparotomy sheets and towels and substituted therefor in his surgery on animals black sheets and towels.

For several years the writer has found relief from the ill effect of sunlight glare in walls, ceiling and operating-room furniture painted a dull flat white, and a few months ago, acting on a published suggestion of Dr. Harvey Cushing, of the Harvard Medical School, had the walls of the operating-room as well as the operating-room equipment painted a light gray. A flat paint was used and no varnish nor enamel was applied over it. In the mellow subdued light thus furnished, the eyes seem more tranquil and the vision more steady and confident. My colleagues speak of the comforting, soothing effect on the eyes.

Dr. Harry Sherman of San Francisco has recently advocated the substitution of dark floors for those made of glaring white tile. He has also suggested the propriety of painting the operating-room walls a bright spinach green. He further advocates the use of glazed white tile above the wainscot. The value of the latter suggestion seems hardly established. The glare from the glazed white tile of the upper part of the wall and ceiling should be eliminated as well. This could be done easily by using flat white paint or dull finish tile or continuing the green of the wainscot to the ceiling and over it. If white paint is to be used in the operating room, it should be flat white.

Sherman, following the example of Carrel, uses sheets, toweling, gowns and coverings for the instrument tables of black.

Whereas, abundant light is indispensable in the efficient performance of nearly every surgical operation, it is clear that one may go to the extreme and with glassy white walls and enormous sky-lights secure a light which is blinding. A good light is not of necessity a strong light. Moreover, a more restful mood may be imparted to an operating-room by the use of soft tints which are grateful and soothing to the eye.

The Germans speak of the "Stimmung" of a room. They appreciate the mood of a room as they appreciate the mood of a picture. We should seek to impart to the operating-room the mood which conduces to tranquillity on the part of the operator and assistants and which soothes fretted nerves.

It is likely that most operators, particularly on entering a strange operating-room are not infrequently annoyed by light glare. This is not a slight matter. It is an evil, the correction of which deserves our interested attention.

THE EARLY DIAGNOSIS OF RUPTURED ECTOPIC PREGNANCY *

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The subject of ruptured ectopic pregnancy has been thoroughly studied with reference to etiology, pathology and treatment. Now, very little discussion is entered into on this subject excepting as to treatment. And even the question of treatment is quite universally settled as being operative, thus leaving the only point of debate to be the time of operation. When shall the abdomen be opened and the ovum and affected tube and ovary be removed?

Some of our most noted surgeons tell us to operate immediately, as soon as the diagnosis is made; while others, equally renowned perhaps, admonish us always to wait until the primary shock of which the patient is suffering has been tided over, and then operate. It appears to me that the solution for this question, in a large percentage of the cases, lies in the making of an early diagnosis of the rupture, before the patient has lapsed into a condition of collapse; and that after this early diagnosis has been made, there can be no argument as to the character of treatment and that immediate operation will be the only indication to be considered.

I believe that this diagnosis can be made much more easily than that of an unruptured ectopic gestation, even when the symptoms following the rupture are very mild in character. To illustrate this possibility, I wish to report two cases which came under my care last year. The first one of these cases is a sample of a rather tardy diagnosis, while in the second one the diagnosis was made quite early.

PATIENT No. 1.—Thirty-three years of age, married seven years. Always had good health and menstruated regularly. She had a miscarriage four years ago. At the time of her present illness she had missed two menstrual periods, had breast signs and other indications of pregnancy, when uterine hemorrhage and pain in pelvic region and rectum appeared.

On date of my first visit, April 8, 1912, patient was suffering quite intensely from pain in the pelvis and was so sensitive to touch that a vaginal examination was very unsatisfactory, and simply disclosed a pathological condition of some sort in the pelvis, but did not admit of any differentiation. The patient was put to bed and given

bromides and codeine, and an expectant plan of treatment was adopted.

On the evening of April 11, while patient was at stool, she became slightly faint, had increased pelvic pain and pronounced pain in the right hypochondrium with every inspiration. When I saw her this time, while there was a suggestion of air hunger, the patient complained more of her inability to breathe on account of the pain in the right hypochondrium. There was only a slight quickening of the pulse, up to 90, and the temperature was normal. The abdomen was quite tympanitic and tender to the touch. There was some pallor, but even this was hard to be sure of on account of the olive complexion of the patient.

Through the following day the patient's condition remained about the same, but on April 13 her condition became critical. Now there was a slight rise in temperature, but the pulse had risen to 110 and was poor in quality. The distention of the abdomen had increased, and pelvic examination showed a large mass in the right side. A diagnosis of ruptured ectopic pregnancy was made, and she was removed to St. Vincent's Hospital at Indianapolis.

By the time we reached the hospital the patient's condition had become grave, her pulse had risen to 126 and was very poor in quality. On opening the peritoneal cavity it was found filled with dark fluid blood and numerous blood clots. A very large organized blood clot was found at the seat of the ruptured right tube, and it, along with the tube and ovary, was removed. The left tube and ovary were found inflamed and enlarged, but on account of the desperate condition of the patient, I deemed it safer not to attempt their removal at this time.

After a rather stormy convalescence, this patient at the end of two weeks seemed all right, when she developed fever, and pain in the region of the left tube and ovary. A diagnosis of tubo-ovarian abscess was made, but I delayed further operative interference with the hope that some resolution of the condition would occur. However, she became septic, and on May 13, just one month after her first operation, I evacuated the tubo-ovarian abscess through an abdominal incision, inserted rubber tube and drainage, and the patient made an uneventful recovery and is now enjoying good health.

PATIENT No. 2.—Is married and 36 years of age. She has always had good health, excepting that she has never menstruated regularly—perhaps only once or twice a year. She is of tall

* Read before the Indiana State Medical Association at West Baden, September, 1913.

stature and quite fat. She gave a history of having had a miscarriage six years ago.

On December 22, 1912, I was called to see this patient. She was now having some uterine hemorrhage, was passing some clots, and was having some pelvic pain. She thought that she might be pregnant and was perhaps aborting. On account of her irregular menstrual habits and the absence of any signs of pregnancy, such a diagnosis was very hard to make, especially since it must still be a very early pregnancy.

Pelvic examination, which was difficult, on account of the long vagina and the thick abdominal wall, showed a pelvis which was tender to the touch on both sides, an enlarged uterus and a small mass in the region of the left tube and ovary. There was present a foul, bloody discharge which contained numerous shreds. A diagnosis of pregnancy with impending abortion was made, and patient was put to bed and given small doses of codeine to control the pain that was present. The pulse and temperature at this time were normal.

The following morning the patient had an increase of pelvic pain and just a slight sensation of faintness. Now, however, there was a marked change in her condition. Her skin was cold and clammy, her pulse had risen to 103, while her temperature was 97. Her fingers were cold and mildly cyanotic, and she complained of a sharp pain over the right hypochondrium every time she breathed. She was of the opinion that perhaps a cold draft of air had reached her side and given her a pleurisy. However, a physical examination failed to disclose any signs of pleuritic involvement. The abdomen was now tympanitic, but not excessively so.

A vaginal examination now showed a continuance of the hemorrhage and a slight although unmistakable change in the left side of the pelvis. The mass that was before palpated seemed larger, although it was not of large size, and there was a distinct rigidity of the vaginal vault on that side. There was practically no dilatation of the cervix. My suspicion of an extra-uterine pregnancy (ruptured) was now aroused, and I watched the patient closely for the next few hours.

Her pulse gradually dropped down to between 80 and 90, and the temperature gradually came up to 99. The tympany of the abdomen was reduced, although it was never extreme, and the pain in breathing soon disappeared. The physical findings in the vagina became progressively more indicative of something wrong in the left side,

and there was no evidence of the discharge of the products of conception from the uterus. I made a diagnosis of ruptured ectopic pregnancy and advised immediate operation; although I fully realized that I was assuming a large responsibility, especially since now the patient did not appear to be very ill.

Finally, on December 25, two days after a diagnosis of ruptured ectopic pregnancy was made, she was removed to Union Hospital at Terre Haute and operated on by Dr. M. R. Combs on the following day. He found a slight amount of bright red blood in the peritoneal cavity and the products of the ectopic gestation, about the size of a walnut, protruding from the ruptured left tube. The left tube and ovary were removed, as also were the right adnexa, for they were chronically inflamed. The patient made a complete recovery. The rupture of this pregnancy was at quite an early date, so that the gestation sack and contained fetus was quite small.

I call especial attention to the hypochondriac pain in both of these cases, not because I consider this pain pathognomic, for we are all familiar with the hypochondriac pains of flatulence. But rather I wish to call attention to the predominance of this pain, especially in the second case, in which the pathological changes were comparatively small, and to the fact that in both cases, either with the occurrence of the rupture or with the advent of additional hemorrhage, the hypochondriac discomfort became quite marked. And so in these two cases, at least, we have added to the picture of internal hemorrhage painful breathing rather than any marked air hunger, as we might have expected in the first case with so much loss of blood.

The differentiation between shock and internal hemorrhage is very frequently difficult to make. And in the second case here reported, while the symptoms were markedly those of an internal hemorrhage, yet the subsequent opening of the abdomen showed that the loss of blood had been very slight indeed, and that therefore the symptoms observed could not have been due to the loss of blood, but rather a manifestation of the disturbance of the nervous mechanism resulting from the rupture into the peritoneal cavity. And thus it appears that the symptoms of shock and internal hemorrhage may be identical, and that sufficient symptoms indicating an internal hemorrhage may be present to enable us to make a diagnosis, and yet the loss of blood be too insignificant to account for the symptoms.

There is no doubt in my mind that in the large number of ruptured ectopic pregnancies

that occur without the pronounced classical signs and symptoms as we have been taught them, there are always present, at some time or another, mild symptoms of an internal hemorrhage. And if the physician has been called early to see these cases, and if he be alert to the possibilities of these patients, he will be able to observe a clinical picture distinct enough to crystallize the history of the patient and her condition as he observes it into a positive diagnosis of ruptured ectopic pregnancy. And he will be able to make this diagnosis long before there has been formed an immense blood clot in the pelvis or before the peritoneal cavity has been filled with blood and the patient has lapsed into a serious condition.

There are surgeons who look upon the advent of a rupture of an ectopic pregnancy rather calmly and say that there is no occasion for alarm or hurry, and that our operations for this condition are rarely life-saving. We do know, however, that patients who are not operated upon for ruptured ectopic pregnancy do die, and that death is due to hemorrhage into the peritoneal cavity when the hemorrhage is at all a copious and rapid one.

There is no doubt that a great many ruptured ectopic pregnancies are taken care of by the various processes of Nature and do get well, or comparatively well. But we also know that some cases of appendicitis with rupture get well without an operation, and yet what one of you would be willing to wait for the kind reparative processes of Nature after you had made a diagnosis of a ruptured appendix?

Reasoning from analogy, you can go through the entire list of pathological conditions for which surgeons operate nowadays, and you can argue that operation is not essential and that perhaps nature will take care of the situation. But who of us is there here that is wise enough and sufficiently endowed with prophetic ability that he is able to say in a given case of ruptured ectopic pregnancy that there will not be a continuance of the hemorrhage, if we do not immediately relieve the patient by an operation?

Ordinarily, the surgeon does not see these cases until a great deal has happened, so that by the time he does see them the diagnosis is comparatively easy. But the family physician is called to these patients early, and it is his privilege and duty to make the diagnosis. And so, instead of depending upon the classical picture of a ruptured ectopic pregnancy, as it is taught us in the text-books—the sharp lancinating pain in the side of a woman who is in the child-bear-

ing period; her marked pallor and extreme faintness, even causing her to fall in her tracks wherever she may happen to be—if we could be able to develop and keep in mind a train of signs and symptoms equally as positive but not so gross and spectacular, the family physician would be able to diagnose a ruptured ectopic pregnancy soon after its occurrence. And by this early diagnosis the patient will be given a better chance for recovery through an early operation than if we wait until the exaggerated symptoms of hemorrhage and shock appear and the question of tiding the patient over until her strength improves, or operating immediately, comes up.

DISCUSSION ON THE PAPER OF DR. SUDRANSKI

DR. R. O. McALEXANDER, Indianapolis: This paper is both timely and to the point. Twelve cases ruptured, but unrecognized at the time of rupture, have come under my observation during the past four years. Periods ranging from five days to three months had elapsed before correct diagnoses were made.

There are few subjects in medical literature which have received the exhaustive discussion accorded this one. Books have been written devoted entirely to it, and works on gynecology contain one or two chapters relating to this pathological entity. Notwithstanding this we continue to err in our diagnosis of this abnormal gestation and women continue to die from this dreaded malady.

It must be admitted that there are many cases of extra-uterine pregnancy which rupture, but which are not recognized, various reasons being assigned for the clinical manifestations produced by the rupture. I have averaged three such cases each year for the past four years.

The victim of this condition rarely applies to any physician until she experiences the symptoms of a rupture. The diagnosis of this condition before this experience is difficult and rarely made.

Reviewing the literature, we are led to believe that the diagnosis of extra-uterine pregnancy subsequent to rupture is attended with little difficulty. The clinical manifestations are so vividly portrayed that the diagnosis may be instantly made on reaching the patient's bedside. There are cases attended by symptoms so typical that the inexperienced will recognize the condition, and other cases so atypical that they will defy the alert diagnostician. These cases first come under the observation of the family doctor. That he is unable to recognize them at once is not surprising. To be able to do so requires a careful study of the clinical picture of the atypical cases.

A history of amenorrhea can be elicited in most cases, if carefully sought. From ignorance or intent, patients not infrequently will deceive the physician in regard to this. This will usually

be followed by irregular and abnormal menstruation. It not infrequently assumes the proportions of a hemorrhage. The sudden onset of an acute lancinating pain in the lower abdomen, attended by a greater or less degree of prostration; not infrequently the patient will recall that she fainted. This occurs at the time of the rupture of the tube and the consequent hemorrhage.

Of the greatest importance to a correct diagnosis is a carefully elicited and written history. Ovarian tumor with a twisted pedicle may more closely simulate ruptured extra-uterine pregnancy than any other abdominal condition. It may lack the menstrual disorder characteristic of the latter, but the pain has the same characteristics.

With reference to the treatment of these cases, each one becomes a law unto itself. All are agreed that this should be surgical. My own experience has taught me that a far greater number will survive this accident without immediate surgical intervention than we were formerly taught. My own rule of action has been to treat each case upon its merits, preferring to err on the side of conservatism rather than on the side of too hasty surgical intervention. These are cases which must be observed from hour to hour, if not continuously, if our best surgical judgment is to predominate.

Let me urge the development of diagnostic skill, the physician's supreme gift. Many thousand lives have been snatched from death by the timely action of the surgeon, and many more would be saved if the family doctor would be ever alert to recognize these cases.

DR. ORANGE G. PFAFF, Indianapolis: The paper deals altogether with ruptured ectopic gestation, and still the more probable field would be with the other, namely, to make the diagnosis before rupture has occurred, which can usually be done if the surgeon or the physician has an opportunity to make an examination. The clinical picture after rupture is a very familiar one. We will have in some degree many, if not most, of the so-called classical symptoms. We will have to deal with an array of symptoms that point to hemorrhage. There is no case of ectopic gestation without internal hemorrhage, and if you trace the case carefully you will find there has been a sudden onset. The patient has not thought herself to be pregnant. Six weeks is about the inviting time for the victims of this act. The woman is seized with an agonizing pain, sometimes referred to one side, but a pelvic pain of great severity in those cases in which rupture takes place between the folds of the broad ligament. The pain is characteristic. The patient has the marble skin, a sudden fainting spell, an uncountable pulse, and other symptoms of that order, but the picture, as a rule, is fairly conclusive. There are cases in which the hemorrhage is slight. These cases always give a certain amount of pain

referred to one side or the other. Examination will disclose an enlarged tube that has ruptured. You will find a mass on one side or the other, and in the vast majority of cases you can make the diagnosis.

As to the treatment, there is no argument in favor of waiting. We have had papers read before the surgical section of the American Medical Association and before other national societies by men of considerable repute who have advised a waiting policy. There is no safety in that. They have claimed that the hemorrhage is self-limited. I have in several instances cut down and tied the spurting vessels. If the hemorrhage has ceased to-day, we have no reason to believe or to know that the broad ligament will not rupture to-morrow and the patient die of secondary hemorrhage and shock. I saw one case recently, for the first time, three or four days after the primary symptoms. The woman was in a critical condition. I was assured she was improving; that her pulse was better, and being a weak little woman, it was thought wise to wait a few days. In two days she was better, and on Thursday, when they thought of calling a doctor to see what the condition was, I received a long-distance message to come immediately, that she had suddenly grown worse. She was in collapse and profound shock. We had a reaction to the administration of salt solution, but she died. As a general proposition these patients die from hemorrhage and shock; but in this particular condition the salt solution is ideal. Following the use of a quart or three pints of salt solution the pulse comes up immediately while you are cutting down and tying the bleeding vessel. Do not tie off the tube if it not infected, because you will not have to drain. There is no good reason for delay in these cases. I have seen nothing but harm from delay. You have doubtless an old hematocele which becomes infected and delay is dangerous.

I had the unique experience some time ago of having five of these cases come to me in the course of four weeks. All were operated, and all got well. There is no reason why we should delay operative interference in these cases. It is getting fashionable to wait, and I protest against it, as the men who advise waiting are not the men who are doing very much of this work.

DR. LEONARD F. SCHMAUSS, Alexandria: I would like to add a few words to this topic. In the first place, in regard to the diagnosis, it is easy enough to make a positive diagnosis of extra-uterine pregnancy when we have a typical case to deal with. Perhaps in 50 per cent. or more of the cases the symptoms are not typical, or if they are typical they are clouded by various complications. There may be an abscess present; there may be previous adhesions which will cloud

the picture of classical extra-uterine pregnancy. I remember two cases in my own practice. The first case was a woman who had been pregnant three times; there was one child born; she had one miscarriage, and the last instance was one of extra-uterine pregnancy, and this patient in every instance, when she was pregnant, would bleed continually. There was continuous bleeding during her whole pregnancy. She had a pelvic abscess of the right ovary and tube. She had considerable pain. The gestation began on the left side. She had one or two severe hemorrhages, during which I was called. Believing I was dealing with extra-uterine pregnancy, I operated before rupture took place, and she made a nice recovery. We should operate, if possible, before rupture takes place in these cases. It is somewhat analogous to appendicitis. The time to operate on a case of appendicitis is before rupture of the appendix occurs, or before there is extension of the inflammation to the peritoneum. You may say, one is a septic condition and the other is not. In extra-uterine pregnancy we are dealing with hemorrhage, which is just as important as appendicitis, so far as infection is concerned.

In the other case I was called three days after rupture had occurred; there was no history of the cessation of menstruation. She had not missed a menstrual period; she had no bleeding from the uterus. The first thing that occurred was a severe pain. She was confined to bed two weeks, had gone one week without much hemorrhage, but one morning was taken with a severe pain and I was called. I found she had peritonitis; respiration 40, pulse 120, and moderate elevation of temperature. This patient was subsequently operated on, and there was a large hematocele to deal with.

As to the treatment, I was glad to hear Dr. Pfaff take the stand he did in regard to operating on these cases. I think every one of these cases of extra-uterine pregnancy should be operated as soon as the diagnosis is made, or as soon as we are certain we are dealing with a surgical condition. It is an important matter. Why should we spend a week or ten days to arrive at a positive diagnosis as to the nature of a trouble in the pelvis; why not subject the patient at once to operation, and if we do that, as in cases of appendicitis, we will have better results. The life of the patient whose case I have just related could have been saved if operated early, and I think we find in the great majority of cases we get better results by operating at once, not when the diagnosis is made, but to determine that the condition is operable, whether it be a pelvic abscess, a twisted pedicle, or what not.

In regard to the differentiation from pelvic abscess, counting of the white corpuscles will determine whether there is a leukocytosis or not.

There will not be a leukocytosis where it is due to hematoma. That is a point on which we can rely. Early diagnosis and early operation are just as important in this condition as in appendicitis.

DR. B. KENNEDY, Indianapolis: I would like to relate the experience I had in my last case of ectopic gestation. The patient was a young woman who had never borne children; she had been married two years, and she had no bleeding whatever. She had a low grade of temperature. I saw her a day or two after an attack of pain; she was quite sensitive; there was a growing mass in the right of the uterus and extended pretty well across. On physical examination it seemed on the right side. She was a fleshy woman. I have seen quite a service, both in an obstetrical and gynecological way, but I am not impressed by my experience with our ability to always make the diagnosis before rupture. A subnormal temperature occurs with the absorption of pus, and there may be pus in the tube, especially if the history is not clear and the classical symptoms are not present. I believe this patient presented suspicious evidence; she had extreme pallor, she had prostration, she had the sudden onset of pain, and the presence of a mass and amenorrhea for one or two months. I opened the abdomen and removed two large clots of blood. The abdomen was full of blood. The tube on the left side had ruptured. I cleaned the abdomen out thoroughly and closed her up. About two or three months after that the patient complained she did not have her monthly sickness, and that her abdomen was swelling again. I made another examination and found the woman now had an intra-uterine gestation.

PITUITARY EXTRACT

After describing what is known of the function of the pituitary body, G. B. ROTH, Washington D. C. (*Journal A. M. A.*, Aug. 8, 1914), notices its therapeutic use and gives a short survey of the clinical literature, which shows that while infundibular extract is relatively non-toxic it does possess a high degree of toxicity in certain cases, especially in its obstetric use, and extreme caution should be exercised in its administration. Little is known regarding its chemical nature and the substances extracted have not the same rank as active principles as the extract from the suprarenal bodies. Roth reports experiments made on the blood pressure effects in dogs and describes his methods, using the strongest preparation as a standard. Six samples made by different manufacturers were tested and a great variability in the activity of the preparations was shown. His conclusions are given as follows: "1. Attention is directed to the wide variability that exists in the activity of commercial pituitary extracts. 2. The use of beta-aminazolethylamin hydrochlorid in 1:20,000,000 dilution is suggested as a standard for use on the isolated uterus of the virgin guinea-pig. 3. The blood-pressure method shows a wider range of variability than does the uterine strip method for the comparison of the relative activity of pituitary extracts and is not applicable to all preparations."

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EDITORIALS

**COMPENSATION LAWS AS APPLIED TO
PHYSICIANS**

Several states have passed compensation laws after prolonged and bitter legislative discussions. Not all of the compensation laws are alike, for the New York law is said to be most liberal to workmen and most severe on the employer, yet the Ohio law is reported as being fair to workmen and employer alike, and the same is true of California. Indiana, in all probability, will pass a compensation law at the coming session of the legislature, and as the medical profession will be affected indirectly by such law, it is to the interest of every medical man to study carefully the merits of any proposed bill and familiarize himself with the subject in general so that he can use his influence in the interest of fair and progressive legislation along the line proposed.

Generally speaking, the compensation law does away with the ever-present wrangling over damages for personal injuries to employees while at work, and the attending expense for medical and surgical attention, lawyer's fees, court costs, etc. It does away with the necessity for indemnity insurance for employers, and if the law is a fair and just one it makes it possible for the employer of labor to have a sense of security which is not his under the present system of awarding excessive damages for trivial injuries through a misconception on the part of a jury as to the actual effect of the injury. It also makes it possible for the injured employee to be certain of fair and adequate compensation in case of injury, without the necessity of awaiting the slow process of courts and the possibility of ultimate failure through technicality to secure just judgment. It makes it possible for the attending physician to secure reasonable compensation for the services that he renders in accident cases, and he is not only sure of the remuneration, but of promptness of payment.

Under the compensation law the employer of labor pays to the state a certain fixed tax, the

amount of which is based on the amount of his pay-roll. This tax is paid to the state in lieu of what the average employer of labor pays to insurance companies for indemnifying policies. In the case of injury the employee applies to the Commission on Compensation of the state and an investigation is begun. The Commission has the power to summon witnesses and otherwise secure trustworthy evidence, and a prompt decision is forthcoming as to the amount of compensation the injured employee should have during the period of enforced idleness, and the amount that shall be awarded as the result of any permanent impairments of function or of fatal issue. The services of the attending physician also are paid for by the state in accordance with the scale fixed by the Commission or made a part of the law. The employer is relieved of obligation when he pays his compensation tax. All awards and the expense of operation are paid from the fund secured from taxation. When properly administered, the findings are in accordance with the facts and the awards are fair and equitable.

In some states where compensation laws have been passed objection has been made by physicians to the scale of medical fees allowed under the law. In all fairness it must be said that while the fees for certain surgical operations, dressings and visits are lower than ordinarily charged by good physicians, yet it must be remembered that in the long run the physician or surgeon who is paid a moderate fee by the state for each and every service rendered an injured employee, and is paid promptly, is far better off than he would be with larger charges which in only a few instances he collects in full after varying lengths of time, and in many instances he does not collect at all owing to either the inability or the lack of intention on the part of the patient to pay.

The enterprise is clearly one of state insurance, which in the beginning may not prove just and beneficial to all concerned, but which is bound to work out satisfactorily in the long run and is a progressive step in the right direction. It will prove a blessing to employers of labor, who, notwithstanding any apparently high tax-rate that may be assessed against them, will have the satisfaction of knowing that there is not the uncertainty attending the present arrangement whereby an employer may be unjustly assessed excessive damages for trivial injuries. The employee will also appreciate the certainty with which his just claims for damages meets with prompt attention. The jackanapes lawyers and the ambulance-chasing physicians will suffer most through the curtailing of their nefarious work, though the

indemnity insurance companies will also do less business with employers of labor. From these sources will come the greatest opposition to the enactment of compensation laws.

The point of interest to all reputable physicians is the enactment of a law which shall be eminently fair in the amount of fees to be awarded medical men for professional services rendered in cases that come under the compensation act. Any bill pertaining to this subject should be scrutinized most carefully by the legislative committees of our medical societies before it comes up for ballot in our legislature. When the subject is properly understood, the medical profession will offer no objection, though we must be assured that our interests will be fully protected. A bill can be prepared and passed which will be eminently fair to employers, employees and medical men, but it is not difficult to foresee the passage of a bill that perhaps would work the rankest kind of injustice to medical men. Therefore, any proposed compensation bill and the possible interpretation that may be placed on any of its provisions should receive our careful consideration and critical analysis. The legislators should be given to understand that we are not opposed to the principle involved, but we desire that the medical man's interests shall receive as liberal consideration as is given those of the employer and the employee.

FALSE WARNING OF OPTICIANS

A well-known optical house is selling to opticians a small printed card which advises the public to avoid the use of "drops" in eye examinations on the ground that such are poisonous and dangerous. The card is enclosed in a small envelope with a red inscription on the outside which says "Poison! Beware! Don't allow anyone to put drugs or 'drops' in your eyes. They are dangerous and poisonous." Aside from the very evident intent to keep patients from going to reputable eye specialists for the proper adjustment of glasses, this latest move on the part of the opticians is one which will work to the detriment of the public both directly and indirectly. On the one hand a certain number of patients will be deprived of the comfort and satisfaction that will be obtained by the adjustment of glasses based on the determination of the refractive condition while the accommodation is suspended, and, on the other hand, a warning that "drops" are dangerous may be considered by some as indicating that even the diseased eye should not be treated by the application of drugs, and blind-

ness may result from the neglect to apply the very remedy which calls forth the opposition of opticians.

The claims of opticians concerning accuracy in correcting refractive errors are absurd and ridiculous in the light of demonstrable conditions which require means and measures which the law does not permit opticians to use. Except by the suspension of the accommodation with a cycloplegic it is absolutely impossible for any observer, no matter how competent, to estimate the static refraction of the eye, and without a knowledge of the static refraction the prescribing of lenses is very apt to be tinctured with a certain amount of guess-work with possible injurious effects or no effects whatever. Some opticians have the effrontery to advertise that they use retinoscopy, the most accurate method of determining refractive errors, as a part of their routine examination, and yet this method of examination requires not only a dilated pupil, but a suspended accommodation in order to be at all trustworthy, even in competent hands.

The prescribing of glasses should be governed by an accurate knowledge of the condition of the eye, both as to refraction as well as to health. In competent hands the prescription will always depend on the general health, temperament and occupation of the patient, as well as the conditions under which the eyes are used. Carried to its logical conclusion, the prescribing of glasses—particularly for the young—should be in the hands of not only the medical man, but the medical man who has been specially trained in diseases and defects of the eye. That a large part of the public appreciates this view of the situation is evidenced by the fact that well-trained eye specialists have about all the work in the fitting of glasses that they can do or care to do. Not an inconsiderable portion of the optical work done by these trained specialists consists in correcting the errors made by opticians. It would be much easier for these men to adjust glasses in the manner employed by the opticians if they could obtain the desired results, but they know that accuracy, and with it the best results, depend on a more painstaking and thorough examination than is given by the optician, and hence the accommodation is suspended, the refractive error determined by retinoscopy and the glasses adjusted with due consideration of all of the conditions presented.

In the hands of the trained physician who uses ordinary precautions, no ill effects have occurred from the use of "drops" in the estimation of errors of refraction, and the optician is quite as

well aware of this fact as anyone else. Therefore, the attempt to influence the public against examinations conducted by trained men is bound in the long run to react to the disadvantage of the opticians. It is but natural that some opticians should put forth an effort to secure the stamp of approval for their ignorance and incompetency, but in doing this nothing is gained by an attempt to tear down others. It is a certainty that the opticians with their scant and easily obtained knowledge concerning the eye are not helping their own cause by attempts to discredit the work and practices of medical eye specialists whose comprehensive knowledge of the eye in health and disease has been acquired through years of study and experience. The optician who is sane and sensible, and therefore knows his limitations, will not endorse the methods of his more ambitious brothers who are trying to feather their own nests at the expense of the medical profession as well as the public.

QUACKERY AND QUACKISH METHODS

There is a tendency on the part of some misguided and shortsighted members of the regular medical profession, oftentimes members of local, state and national medical societies, to adopt quackish means and measures for the purpose of securing a certain kind of prestige and an increase in professional work. It is, to say the least, in questionable taste to solicit and secure gratuitous publicity in the public press in connection with the treatment of cases, but it is a breach of professional ethics and propriety to advertise outright any supposed particular skill or the possession of unusual equipment or accomplishments with a view to encouraging patients to consult the one who so publicly bids for patronage. Occasionally a doctor advertises over his own name that he has returned recently from Europe where he visited all of the famous clinics and took special courses in surgery or some other branches of medicine, and that he feels equipped to care efficiently and satisfactorily for all patients who come to him for work in his particular line. This is in shocking bad taste and should be subject to censure from any medical societies in which the advertiser happens to hold membership, but it is far worse to adopt the more flagrant abuses of ethics and propriety so universally employed by quacks in advertising means and measures for the relief or cure of certain diseases.

In this connection we believe that we are justified in calling attention to a letter from one

of our readers, which, without signature, is as follows:

Enclosed is one of the several hundred circulars which have been mailed all over the surrounding country, with special letters of solicitation to people. A similar "ad" and cordial invitation was placed in the county newspapers.

A special agent has been at this office conducting a free treatment and speling to the people all around the office, sidewalk and street. A regular street-corner performance—except the negro and banjo.

Look over the enclosed circular which has been sent promiscuously through the mails. This one, together with an invitation to call, was received by a patient of mine.

This man belongs to the county and state medical societies.

I would like to know your comment on such a performance, and what you think should be the attitude of our county medical society concerning the matter.

Aside from numerous newspaper clippings which have been sent to us and which bear out the statements made in the letter, we herewith reproduce the circular referred to, which it is reported has been sent broadcast to patients. It is as follows:

ANNOUNCEMENT

It gives me great pleasure to announce that I have installed in my office a Neel-Armstrong Oxyoline Apparatus for the treatment of all forms of disease due to Auto-Intoxication and Sub-Oxidation.

This machine, by the action of a high voltage of electricity upon the air which passes through it, generates ozone, which in its turn passes through hydrocarbon oils, thus forming Oxyoline, a terpene peroxide gas, a property in the air breathed among the Pines and Balsams of high altitudes, only many times more potent. When inhaled, it passes through the lungs into the blood current and is carried to every part of the body, destroying harmful bacteria, and increasing elimination, relieving and revitalizing the sluggish and diseased parts.

This treatment has given wonderful results in Catarrh, Catarrhal Deafness, Bronchitis, Hay-Fever, Asthma, LaGrippe, Incipient Tuberculosis, Diabetes, Rheumatism and all Blood Disorders, Headache, Insomnia, Epilepsy, Neuritis, Neurasthenia, St. Vitus' Dance, etc.

You are cordially invited to visit my office each day, on Wednesday, Thursday and Friday, July 22, 23 and 24, when Apparatus will be demonstrated by Mr. William D. Bailey, a representative of the inventor, who will explain to you its methods of operation and the benefits to be received.

Mr. Bailey will also give free treatments during the three days to all who wish to avail themselves of the opportunity.

Come each day and see the machine and bring your friends. You will be interested.

_____, M.D.

Now, a word concerning the Oxyoline machine that is exploited in such extravagant terms may not be out of place. The claims are exaggerated,

as one can well imagine. Its main selling point seems to be that it is a money maker for the physician. This is easily believable, as the thing is a somewhat theatrical piece of apparatus, and doubtles those men who consider medicine as a trade rather than as a profession may be able to find some use for it. It is really a wretched piece of commercialism.

Here are a few of the claims taken from the Oxyoline literature for the year 1914:

Oxyoline is better than climate, since it presents in an intensified form all of the stimulating and curative properties of the air, of the seashore and pine forests, with none of the dangers and drawbacks incidental to removal from home, usually required to procure them.

The most powerful remedial agent now available.

Nature's great restorer.

Oxyoline is the greatest blood building and anti-septic agent within the reach of the medical profession.

In a booklet of testimonials also sent out this year the company published the following statements regarding this device, and attempts to shift the responsibility by alleging that the statements are made by physicians who have used the machine. Incidentally, the names of the physicians are not given.

The greatest therapeutic agent known.

It purifies the blood.

In pernicious anemia I have cured two cases that were given up by other physicians.

Chronic diseases fade away before the treatment like dew before the morning sun.

It is an absolute specific in syphilis.

A great therapeutic and financial success.

As we have said, one of the chief selling points of the machine seems to be the fact that it makes money for the doctor. For instance:

The special fee for the administration of Oxyoline is a necessary and entirely justifiable feature not at all unworthy of consideration.

It has been a big paying proposition.

I would venture to say that in twelve months I can figure on 400 to 500 per cent. on my investment of \$900 for the apparatus.

It will make you money and friends.

It is a business getter and a sure enough winner.

That the device is used in the interest of quackery is indicated by the prominence which the Oxyoline machine is given in the advertising of a large number of quackish physicians, including the United Doctors and others of their kind. For instance: The United Doctors advertise that "Oxyoline is a great cure for bronchitis, catarrh and hay-fever."

In Indiana the advertising quacks have used pictures of the Oxyoline machine and extravagant statements concerning the cures accomplished

by Oxyoline treatment as a means of increasing patronage. Under the title, "Diabetes Cured by the Use of Oxyoline," Dr. Wells of Fort Wayne solicits patients who are suffering from diabetes, and in the advertising gives the following:

"Dr. J. A. Crawford, secretary of the Crawford County Medical Society, of Crestline, Ohio, says: 'I have had grand results in four cases of diabetes by the use of Oxyoline.'"

As an indication of the loose way in which these advertising quacks handle the truth, we are reproducing in part a letter from a prominent physician of Crestline, Ohio, which speaks for itself:

I have practiced medicine in this place for the last twenty-three years, and during that time there has not been any one here by the name of Dr. J. A. Crawford. I am a charter member of the Crawford County Medical Society, and we have never had a secretary by that name or a member by that name.

As a further stimulant to secure business, a number of quack doctors advertise that the inventor of the Oxyoline machine will be on hand to demonstrate its wonderful results.

Sufficient evidence is obtainable to prove that the Oxyoline machine is exploited under claims that are exaggerated, that it is advertised in a quackish manner and is in the possession of a number of advertising doctors who commercialize the questionable merit that it possesses, and that it is sold for a price that should arouse the suspicion of prospective purchasers at once as to its value. No physician who has the slightest regard for the ethics of his profession or an appreciation of the propriety that is expected of a reputable medical man will be guilty of the quackish methods pursued by those who exploit the Oxyoline treatment. Never will they resort to the questionable practices followed by those who adopt the public press or circulars as a means of announcing the possession of any peculiar or unusual ability or equipment for the treatment of the sick and afflicted. A good reputation is worthy of the aspiration of any medical man, and resort to the means and measures employed by quacks should meet with censure from confrères as well as the public. There has been altogether too much of a tendency on the part of some members of our medical societies to resort to commercialism, and it is time that the growing evil is checked and that those who are guilty of objectionable practices shall receive the rebuke they deserve. In no other way is it possible to hold the confidence and respect of the people and to maintain the honorable position that so long has been held by our profession.

EDITORIAL NOTES

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better *Journal* for you.

READ the program. It shows that there will be some interesting papers and discussion at the next session of our association.

DO YOU mention *THE JOURNAL* when you write advertisers? Have you noticed that several of our advertisers are offering free samples? What you want may be obtained from our advertisers, and when you patronize them, mention *THE JOURNAL*.

THE Pan-American Surgical and Medical Journal, an entirely independent journal, has been made the official organ of the Louisiana State Medical Association. A refreshing bit of news contained in the editorial department is the statement by the editors that the advertising will conform to the rules of the American Medical Association.

THE preliminary program for the next session of the Indiana State Medical Association is published in this number of *THE JOURNAL* in the department devoted to Society Proceedings. The September number will contain the completed program, with abstracts of all papers, and other information of interest to those who are to attend the Lafayette session.

THE next annual session of the Indiana State Medical Association is to be held at LaFayette, Thursday and Friday, September 24 and 25. With such a fairly central location and excellent transportation facilities there is no reason why there should not be a large attendance. As usual, the scientific committee has prepared an excellent program and the local committees in LaFayette are arranging for suitable entertainment.

A WELL-KNOWN Indiana druggist is being urged to make the race for Governor two years from now. We hope that the gentleman is not in sympathy with the movement on the part of the pharmaceutical association to restrict the sphere of usefulness of the medical profession and feather the nests of the druggists by compelling doctors to write prescriptions for every dose of medicine that is administered.

WE desire to remind our readers that there are two or three Christian Scientists who are candi-

dates for election to the next Indiana Legislature. What the Christian Scientist legislators would do to bills relating to medicine, public health and sanitation "would be a plenty." The physicians of Indiana should note in advance the attitude of candidates concerning legislation which has the approval of the medical profession.

THE war preparations in Europe have tied up transatlantic transportation and made it almost impossible to obtain money in Europe on letters of credit or exchange. Hundreds of doctors who have been attending the Clinical Congress of Surgeons in London and visiting clinics on the continent, will be greatly inconvenienced as a result of the difficulty in securing return passage and money for expenses. Fortunately the United States Government is arranging to offer relief.

IT is not our desire to tire our readers by too much harping on the subject of patronage of our advertisers, but we desire to emphasize the fact that *THE JOURNAL* carries a select line of advertising and sacrifices no inconsiderable income that could be obtained if no discrimination were used. Not only should readers of *THE JOURNAL* show their appreciation of our efforts to give them clean and approved advertising from perfectly responsible and reliable firms, but they owe patronage to *THE JOURNAL's* advertisers for the support that is given to a periodical which appeals to the highest ideals.

ELBERT HUBBARD has endorsed Sanatogen and that settles it, for when the four-flushing bard of East Aurora puts his seal of approval on a thing the rest of mankind, in his estimation, should forever hold its peace. The Council on Pharmacy and Chemistry of the A. M. A., which pronounced Sanatogen a fraud, should rescind its action. Incidentally, it may be said that Hubbard writes little booklets to indorse many enterprises and many things, not even omitting socks. Can it be possible that writing of this character carries with it more than the usual profit? Perish the thought!

THE September number of *THE JOURNAL* will be known as *The LaFayette Number*. It will contain the completed program for the next session of the Association, as also the formal reports of all officers and standing committees. We respectfully urge that those who are scheduled to make committee reports or to read papers at the LaFayette session, shall prepare their reports and abstracts of papers so that copy may be in the

hands of the editor of THE JOURNAL not later than August 25. Formal letters making this request have been sent to those from whom manuscripts are expected, and this is a final reminder which we hope will be given appropriate attention.

If you expect to attend the next session of the Indiana State Medical Association at Lafayette, on September 23, 24 and 25, you are requested to drop a postal card to Dr. A. C. Arnett, Lafayette, chairman of Committee on Hotel Accommodations, stating on what day you will arrive in Lafayette and whether or not you will be accompanied by your wife, in order that reservations can be made for you. This is quite necessary as it is going to overtax the hotels to care for the crowd, and it may be necessary to take care of some of the doctors in private homes. Kindly respond by postal that reservations can be made. First come, first served. When arriving, you will be assigned your room at the registration desk by a member of the Committee.

THE osteopaths are publishing in the daily newspapers and freely circulating a statement entitled "Why I am a Doctor of Osteopathy," supposedly emanating from P. H. Woodall, President of the American Osteopathic Association, who claims to have a medical degree, but to have abandoned the practice of regular medicine for osteopathy. It may be illuminating to know that the gentleman who talks so glibly about being a practitioner of regular medicine is licensed in Tennessee as an osteopath, and is reported as having been unsuccessful in building up a practice until he took up osteopathy and with it the privilege to advertise. Some men are looking for an opportunity to adopt commercial methods and osteopathy is one of the vocations which thrive on advertising.

THE Federal Government has issued a warning against antifat cures, and makes the emphatic statement that all antifat remedies are absolutely worthless and are exploited to humbug the people. Where patients who are taking antifat cures seem to lose weight, the result may be attributed to hot baths, and the diet and exercise recommended as an accompaniment in taking the medicine. The only ways that the department specialists know of safely reducing flesh are rigid diet and stringent exercise, and those to be effective must be continued over a long period of time. The fat-reducing patient must eliminate from his diet starch, fats and sugar. It should be re-

membered, however, that loss of flesh is by no means beneficial if accompanied by loss of health and strength.

UNDER the title of "A New Way to Victimize the Afflicted," the well-known firm of Parke, Davis & Company have sent out a circular containing a facsimile of a fake price list which some quack doctors in California were using as an insert in regular Parke, Davis & Company catalogues. As might be expected, the fake price list quotes enormous prices for various biologic products and so-called specialties, the intent being to show the catalogue to the patient and collect exorbitant charges on the plea that the well-known firm of Parke, Davis & Company are receiving the amount charged. As has been indicated, it is a new way of victimizing the afflicted, and we hope that some means will be adopted whereby not only the quacks will be punished, but the firm of Parke, Davis & Company protected in their reputation for fair and consistent charges for their goods.

THE editor of THE JOURNAL frequently receives inquiries as to where to send patients suffering from the effects of drug and alcohol addiction. In every instance the inquiry is met by, furnishing copies of the advertising in THE JOURNAL covering hospitals which take drug and alcohol habitues. We carry the advertising of several trustworthy institutions, and desire to call the attention of our readers to the same. Drug and alcohol addictions may be considered amenable to treatment. Sanitarium care is necessary for the successful handling of such patients, and those institutions that are in charge of reputable physicians are deserving of the patronage of the medical profession. In view of the persistence with which some quackish and grafting jag-cure concerns flood physicians with advertising and literature, we feel justified in making a plea for extending patronage to the *reputable* hospitals and sanatoriums advertising in THE JOURNAL that are prepared to take drug and alcohol cases.

THE Indianapolis *Star* says that a great change has come over the medical profession concerning the question of advertising in the public press, and that doctors are beginning to think that there is no sane reason why they should not advertise and fight the charlatans on their own ground. We fail to understand how such an opinion could be entertained unless it comes through observation of the frequency with which some of our erstwhile medical leaders permit

themselves, often through their own solicitation, to be exploited in connection with medical societies, surgical operations or educational work through the medium of the leading daily papers. The really competent, conscientious and ethical physician is just as much opposed to blatant advertising now as he has been in the past, and the attitude of the American Medical Association at Atlantic City has only to do with that phase of the subject which deals with the preparation of medical news to which the public is entitled, but which is devoid of personality.

THE United States medical officers at Vera Cruz have had to contend with small-pox, which is always more or less prevalent in Mexico, just as it was in the Philippine Islands before the American invasion. General vaccination was begun on May 18 with virus obtained from the United States, and up to the first of July nearly 45,000 persons had been vaccinated. Since the population is less than 60,000, the vaccination of the entire city will be completed soon, if not completed already, and small-pox there will be a thing of the past. The good effects of vaccination have been shown by the diminution in the number of cases of small-pox. Strange as it may seem, the antivaccinationists have offered no comment, but objections to vaccination have little weight with the army officers who have seen the practical results accomplished from compulsory vaccination in the Philippine Islands, Hawaii, Cuba and Porto Rico, where small-pox was more or less constantly present until protective measures were instituted.

THE editor of THE JOURNAL is anxious to secure for publication some practical articles dealing with the business side of the practice of medicine. Every physician should be a business man as well as a doctor, and he can assume this rôle without resort to objectionable commercialism. A well-written article dealing with the question of system as it pertains to office affairs, visits to patients, hours for study and recreation, presentation of bills, collections, insurance and a number of other things which make for success or failure will prove interesting and valuable to many of our readers. Another subject which we hope to have discussed in THE JOURNAL is that of drug dispensing by the physician. It is worthy of discussion; first, because so many doctors are, through force of circumstances, compelled to dispense their own drugs; and second, because of the effort on the part of pharmaceutical associations to have laws passed which will absolutely

prevent physicians from dispensing anything. Any well-written article on these subjects will be published in an early number of THE JOURNAL.

BECAUSE you hear people finding fault with every other doctor in the community but you, don't get it into your head that you are escaping criticism. Remember that no matter how competent you may be a certain percentage of your patients will be dissatisfied with you and go to the other fellow complaining bitterly about you. You are not immune to criticism, whether for cause or not, even though the criticism never comes to your ears. Much of the fault found with you as well as others is without suitable foundation, for it is a well-known fact that ignorance as well as "general cussedness" often makes a dissatisfied patient for you as well as others, and such people deserve no sympathy when they tell their tales of woe. When a patient is encouraged to air his grievances against a fellow practitioner he is also being encouraged to retaliate against you at the first opportunity, and it seldom fails that opportunity finally offers for that kind of a patient to do you a bad turn. Therefore he should be discouraged in his fault-finding.

IN this number of THE JOURNAL the notes on Propaganda for Reform contain comments which are worthy of consideration by all physicians. For instance, we have been familiar with the claims of manufacturers and some professional men that lithium salts are valuable in the treatment of uric acid diathesis. The Council on Pharmacy and Chemistry says that experimental work has failed to show that lithium salts or the alkalies cause the absorption of deposited urates, gouty tophi, etc. There is no reliable clinical evidence that lithium salts increase the excretion of uric acid by the kidneys, except as they exert a diuretic action.

Another subject long of interest to the medical profession is the treatment of hay-fever, and New and Nonofficial Remedies now describes a serum for the treatment of hay-fever. *The Journal of the American Medical Association* says that there can be no vaccine treatment of this disease for the reason that it is produced, not by bacteria, but by the pollen of various plants. The use of vaccines derived from the micro-organisms found in the nasal secretion are still in the experimental stage.

THE Panama Pacific Exposition to be held in San Francisco during the summer of 1915 will be well attended if no more than those who are connected with various organizations that have

voted to hold their annual sessions in San Francisco next year are visitors. A large number of medical, social, industrial, educational, hygienic, fraternal and economic associations are numbered among those who have selected the Pacific Coast cities, and in particular San Francisco, as meeting places for next year sessions. The medical profession will be well represented by the American Medical Association, the American Academy of Medicine, and fifteen other organizations of less prominence. The sessions of all these bodies will be held for the most part in the new permanent auditorium which the Exposition is erecting at a cost of more than \$1,000,000, and which has a seating capacity of 10,000 in its main hall, with eleven subsidiary halls. The American Medical Association will have a valuable exhibit showing the work of the Association in educational and legislative work, particularly looking to the elimination of quacks and fake medical schools and adulterated and fake medicines and drugs. Several other medical organizations will have exhibits of a scientific or educational character.

DR. LOUIS P. WEINBURG of Ligonier, Ind., is under arrest, charged with taking advantage of his relations as family physician and causing the transportation of an 18-year-old girl from Kalamazoo to Chicago in May of last year for immoral purposes. The federal officers claim that Dr. Weinburg doped the girl with morphin and hyoscin in order to gain control over her, and in Chicago he and the girl were registered at the Great Northern Hotel as man and wife. If all of the charges are true — and the United States Government seldom moves in a case of this kind without having an abundance of evidence — Dr. Weinburg deserves to suffer the full penalty. His wife and children will meet with no more disgrace if he goes to the penitentiary than they are facing now. To the credit of the medical profession as a whole it may be said that cases similar to that of Dr. Weinburg are exceedingly rare, and while we believe in the punishment of the few lecherous ones who take advantage of their positions as family doctors, the hue and cry of several newspapers in Indiana to the effect that Dr. Weinburg should be punished under the White-Slave Act in order to make an example of him to other physicians, is entirely uncalled for and an unjust insinuation that such crimes as that committed by Dr. Weinburg are a common occurrence.

QUITE recently the editor of THE JOURNAL has taken occasion to inquire of some of the physi-

cians and specialists who carry their cards in the Physicians' Directory, published in THE JOURNAL, as to whether such cards were a paying investment, and in not a single instance was there anything but expressions of satisfaction with the returns from such a form of ethical publicity. Two or three of the physicians made the claim that large financial returns could be traced directly to the publication of a professional card in THE JOURNAL. We are distinctly opposed to much of the commercialism existing in the medical profession and to the policy which condones many varieties of newspaper publicity, but we believe that there is a legitimate and ethical way by which reputable surgeons, laboratory men, consultants and medical specialists of every description can consistently and ethically extend their acquaintance and add to the amount of professional work done by making modest announcements in reputable medical journals of known circulation. Aside from all this, we believe that the publication of physicians' cards performs a distinct service to a large class of men who really want to know who is doing work in the various special lines. We are rather proud of the Physicians' Directory published regularly in THE JOURNAL, and we are pleased to know that it not only serves a useful purpose, but is a means of profit to those who patronize it. Incidentally, the patronage assists in maintaining THE JOURNAL, and that is a consideration which is distinctly approved by those who are responsible for the financial affairs connected with publication.

MR. JOHN A. PATTEN, one of the prominent officials in the Methodist Episcopal Church, who secures large profits from the Chattanooga Medicine Company which exploits the nostrum Wine of Cardui, came into prominence which he did not relish through an article which appeared in *The Journal of the American Medical Association*, under date of April 11. Mr. Patten thought to clear himself, and incidentally create a little sympathy, by threatening *The Journal of the American Medical Association* with a suit for damages. The answer has been a scathing exposé of the practices of the sponsors for the Wine of Cardui in *The Journal of the A. M. A.*, under date of July 18. Incidentally, it is shown that Mr. Patten's attorney is or has been the attorney for the National Wholesale Liquor Dealers' Association of America, and that Wine of Cardui contains sufficient alcohol to justify the charge that the principal effect which comes from its use is that arising from the stimulating properties of the alcohol. *The Journal of the A. M. A.* closes

with a quotation from *Colliers'*, which is as follows:

"The law may better conditions in some respects, but whether it is bad 'booze' or poisonous patent medicines that are dispensed, the only way really to accomplish anything is to bring shame into partnership with the man who makes money out of it."

Mr. Patten, with his high church affiliations and religious pretensions, has been shown to be a party to and to profit by the exploitation and sale of a fraudulent patent medicine made by a company in which he is chief owner. The Methodist Episcopal Church will fall short of fulfilling its best obligations if it does not divorce itself from Mr. Patten and the business that he represents.

WE have always maintained that there was no logical reason why anything and everything that is used by physicians should not be advertised in medical journals. Accordingly, we have made strenuous efforts to secure advertising contracts from many national advertisers who carry advertising in every conceivable publication except medical journals. There is every reason to expect that before long many general advertisers will appreciate the fact that doctors are usually liberal spenders and they buy all of the things that appeal to the better class of people. There is no reason why the doctor's attention should not be called to many of the necessities and luxuries which he employs by having those things advertised in his medical journal. Quite recently we have made a start in the direction indicated by securing a liberal advertising contract from one of the well-known health food manufacturers. Through the efforts of the Cooperative Advertising Bureau of state medical journals, backed by the influence of the Council on Pharmacy and Chemistry of the A. M. A., this concern has been made to appreciate the value of the approval of their product by qualified medical men. They have been willing to cut out misleading and extravagant claims concerning their product, and to make an appeal through quality to medical men for support. A large number of medical journals, and the firm under consideration, will be greatly disappointed if this very commendable effort to endorse a product along legitimate lines does not meet with success. It is a test of clean advertising as against the blatant, misleading and oftentimes dishonest claims frequently put forth in order to secure patronage. Will the medical profession demonstrate that clean advertising pays?

INCLUDING those who were initiated recently in Philadelphia as well as those who were initiated at Chicago, the Indiana members of the American College of Surgeons are as follows:

| | |
|---------------------------------|----------------|
| Paul J. Barcus..... | Crawfordsville |
| Charles E. Barnett..... | Fort Wayne |
| John F. Barnhill..... | Indianapolis |
| L. D. Brose..... | Evansville |
| Albert E. Bulson, Jr..... | Fort Wayne |
| Edmund D. Clark..... | Indianapolis |
| William Franklin Clevenger..... | Indianapolis |
| Luzerne H. Cook..... | Bluffton |
| Edgar Cox | Kokomo |
| William R. Davidson..... | Evansville |
| Joseph Rilus Eastman..... | Indianapolis |
| Thomas Barker Eastman..... | Indianapolis |
| William Seigman Ehrich..... | Evansville |
| Bernhard Erdman | Indianapolis |
| Benj. L. W. Floyd..... | Evansville |
| Willis D. Gatch..... | Indianapolis |
| Alois Bachman Graham..... | Indianapolis |
| A. M. Hayden..... | Evansville |
| George Frank Holland..... | Bloomington |
| Frank Hubert Jett..... | Terre Haute |
| Norman E. Jobes..... | Indianapolis |
| George Frederick Keiper..... | LaFayette |
| Bernays Kennedy | Indianapolis |
| Bleeker Knapp | Evansville |
| David J. Loring..... | Valparaiso |
| S. C. Loring..... | Plymouth |
| L. Pitt Y. McCoy..... | Evansville |
| Charles Melvin Mix..... | Muncie |
| Frank A. Morrison..... | Indianapolis |
| John Holliday Oliver..... | Indianapolis |
| Everett Ervin Padgett..... | Indianapolis |
| LaFayette Page | Indianapolis |
| Hugo Otto Pantzer..... | Indianapolis |
| Miles F. Porter..... | Fort Wayne |
| Marcus Ravdin | Evansville |
| Alfred P. Roope..... | Columbus |
| Maurice I. Rosenthal..... | Fort Wayne |
| David Ross | Indianapolis |
| Charles Stoltz | South Bend |
| George K. Throckmorton..... | LaFayette |
| Ernest de Wolfe Wales..... | Indianapolis |
| Edwin Walker | Evansville |
| James Y. Welborn..... | Evansville |
| Richard B. Wetherill..... | LaFayette |
| Kent Kane Wheelock..... | Fort Wayne |
| Leon J. Willien..... | Terre Haute |
| William N. Wishard..... | Indianapolis |
| Jonathan P. Worrell..... | Terre Haute |

THE Associated Press reports that the Health Board of Richmond is prosecuting a Christian Science healer for practicing medicine without a license. The specific charge is that the Christian Science healer was the only attendant on a 4-year-old child that died from the effects of diphtheria. We hope that the Christian Science healer will get something more than a fine for practicing medicine without a license, for in the face of our present knowledge of diphtheria and the treatment necessary in order to effect a cure, there can be no question but that a child suffering from the disease is cruelly and criminally neglected when it has no other treatment than that afforded by the worthless and senseless min-

istrations of a Christian Science healer. Diphtheria is an unusually fatal disease unless properly treated, and statistics show that since the introduction of antitoxin, which is a specific, the death-rate has fallen to practically nothing. So definite has become our knowledge concerning the efficacy of antitoxin in the treatment of diphtheria that some health boards publicly announce that a death from uncomplicated diphtheria is an unnecessary death and that the fatality can be attributed to ignorance or negligence, or both, on the part of either the family or the attending physician. Therefore, in this day and age it is nothing short of criminal to deny a diphtheria patient the benefit of antitoxin treatment. Christian Science has many crimes of omission that may be laid at its door, but the worst of all is the crime that goes with the Christian Science ministrations to defenseless children suffering from diphtheria and other diseases that are more or less fatal unless given appropriate medical and surgical attention. It is all very well to talk about the value of Christian Science in a lot of emotional or pseudo-diseased conditions in which Christian Science will do no harm even though it does no good, but when it comes down to severe pathologic lesions, and particularly a disease like diphtheria, which previous to the introduction of antitoxin was attended with such a frightful mortality among children, it is time to cut out sentiment and punish those who are contributing directly to the number of unnecessary deaths.

A LOT of maudlin sentiment and misguided energy is exercised by some of the societies for the prevention of cruelty to animals, and the spending of \$200,000 as a memorial hospital for animals to be located, as the prospectus says, "in the same beautiful section of the city (Boston) with the Art Museum, the Boston Opera House, a splendid group of Harvard Medical School buildings, the new million-dollar home of the Y. M. C. A., and the large number of noble hospitals either already finished or in the course of construction," is enough to nauseate right-minded people when one considers the many ways in which this large sum of money could be expended for the benefit of suffering humanity. We are quite in sympathy with the principles involved in giving dumb animals the kindness and care that they deserve, but we are decidedly opposed to the mawkish sentiment displayed by a certain number of weak-minded people who place dogs and cats on a higher plane than children. It is all right to talk about "kindness, justice and mercy to every living

creature," and it sounds very well, but there are some creatures that are a menace to the lives, comfort or happiness of the human race, some that were placed here to be used as sustenance for man, some to aid man in his labors, and others that are of little or no use to him of any kind whatsoever. For the most part our domestic animals have received in every community the humanitarian treatment to which they are entitled, and in many localities the activity of our humane societies has secured better protection for domestic animals than is accorded children. To spend \$200,000 for a beautiful memorial hospital for the animals of Boston, in the face of a crying need for hospitals, schools and homes for thousands upon thousands of sick, deformed, orphaned or destitute children, is enough to make Americans who have good red blood in their veins blush for shame to think that we have anyone who would propose such a thing, with the sickening sentiment that it represents. It is such a spirit that has led innumerable idiotic women in a time of panic that threatened human beings and household pets to demand that the household pets be saved first. We have nothing but condemnation for people whose moral senses are so perverted that they are willing to place the lives of dumb brutes ahead of the lives of human beings. It is such inane and illogical reasoning that prompts antivivisection agitation, which if carried to its ultimate end would prevent scientific progress and the saving of untold numbers of human lives.

THE Indianapolis *Sun* has aligned itself with the antivaccinationists by condemning the compulsory vaccination inaugurated in Indianapolis. As might be expected, a number of the smaller newspapers over the state are quoting liberally from the *Sun* and endorsing the opposition to the advice and rules of the State Board of Health. What a pity it is that some of those who object to the protection offered by vaccination cannot be made to appreciate the reasons for belief in the efficacy of vaccination through experience with an attack of small-pox and the immunity that is offered those who have been vaccinated. A few years ago a small town in northern Indiana was visited by an epidemic of small-pox, which gained tremendous impetus because a few doctors, aided and abetted by the people, insisted on calling the disease Cuban itch. The State Board of Health finally took a hand in the affair and ordered compulsory vaccination. One of the loudest yelpers in the pack of objectors to a diagnosis of small-pox and to enforced vaccination,

was a well-known business man of the town, who agreed to lead a party in an effort to tar and feather the health officers or anyone else who attempted to carry out the orders concerning quarantine and vaccination. Before he could carry his project to a successful issue, he was attacked with the disease that was epidemic among his neighbors, and his wife and three children were also soon down with the disease. A 14-year-old German girl, acting as a maid for the family, and having a very righteous regard for the value of vaccination—as most Germans do—had, unbeknown to her employers, been vaccinated. She and she alone nursed and cared for the stricken family throughout their small-pox experience. Not one of the afflicted family escaped disfigurement, and the man nearly lost his eyesight and will always have greatly impaired vision in one eye; but the bitter experience and the lesson it taught had its effect, and the man is now one of the staunchest advocates of vaccination. To use his own words, "When every member of my family was desperately ill from small-pox and a 14-year-old German girl, who had been vaccinated, nursed and cared for us throughout the illness without contracting the disease, and I afterward learned that almost without exception those in our little town who had been vaccinated escaped the disease and those who had not been vaccinated contracted the disease. I realized what a fool I had been in opposing a measure that undoubtedly affords protection in practically every instance. I am now an advocate of compulsory vaccination under proper regulations." It is an expensive way to gain advocates for vaccination, but it is a pity that a few of the loudest howlers against vaccination cannot learn through an equally bitter experience.

OBITUARY

IN MEMORIAM

HARRIET KEMPER, daughter of William and Elizabeth Kemper, was born in Kenton County, Ohio, May 9, 1844, and died at the home of her daughter, Mrs. John L. Smith, in Terre Haute, Ind., on June 13, 1914, aged 70 years, 1 month and 4 days.

When she was 4 years of age, her parents moved to Iowa, making their home at Oskaloosa. There she spent her youth and girlhood, and there received her education.

When sixteen years of age, she united with the Methodist Episcopal Church, and remained a faithful and consistent member until the day of

her death—a period of fifty-four years. Forty-eight years of this time she was a member of the Simpson Chapel, afterward High Street Church, in Muncie, Ind. Her religious life was one of faith and simplicity.

Her sickness and death were due to an internal cancer, and for a period of more than six months she received medical and surgical care. During all this time of affliction she was patient and uncomplaining.

She was united in marriage to Dr. G. W. H. Kemper of Muncie, Ind., Aug. 15, 1865. The doctor and his young wife came to Muncie Aug. 18, 1865. Here they continued to reside and reared their family.

Four children were born of this union, Georgette, now Mrs. John L. Smith of Terre Haute, Dr. Arthur T. Kemper of Muncie and Dr. Wm. W. Kemper of Lancaster, Ohio. One son, the first, survived but a short time. This was the only death in the immediate family from the date of their marriage until her death, a period of nearly forty-nine years.

RESOLUTIONS

WHEREAS, Bereavement has befallen our venerable and beloved brother, comrade and friend, Dr. G. W. H. Kemper, and his sons and daughter, in the death of a loving and beloved wife and mother, and,

WHEREAS, In the departure of this noble woman the whole community suffers a conscious loss, and the model home over which she presided for so many years is left desolate; and realizing that the greatest sorrow befalls our dear friend, the patriarch and sage of our society, in the eventide of life, therefore be it

Resolved, By the Delaware County Medical Society that we tender to Dr. Kemper and his sons and daughter our full measure of sympathy and the consolation of love and esteem which makes common our sorrow in their affliction.

Resolved, That a copy of these resolutions be furnished to Dr. Kemper and children and be made a part of this meeting.

(Signed by) W. W. WADSWORTH,
H. A. COWING,
G. W. BUCKLIN,
Committee.

NEWS NOTES AND PERSONALS

INDIANAPOLIS

DR. THOMAS E. STUCKY has been appointed collector of customs for Indiana.

DR. ARTHUR E. GUEDEL has changed his office to 717 Hume-Mansur Building.

DR. AND MRS. EDGAR F. KISER have been traveling in the East for several weeks.

DR. HORACE R. ALLEN, who has been seriously ill with pneumonia, is reported convalescent.

DR. JAMES H. TAYLOR is reported to have recovered from a recent illness with pneumonia.

DR. SAMUEL JOHNSTON entered St. Vincent's hospital early in July suffering from an iritis of septic origin.

DR. J. W. RICKETTS was in St. Vincent's Hospital for a week during July for the removal of his tonsils.

DR. J. D. GARRETT spent the month of July in Boston in attendance at the Harvard Post-Graduate School.

DR. A. L. MARSHALL, superintendent of the Deaconess Hospital, is doing postgraduate work on the eye in Chicago.

DR. W. F. FORKNER, intern at the City Hospital, has decided to locate in central Wisconsin and will shortly move there.

DR. HARRY S. MACKEY has been appointed physician for the new inebriate ward at the Marion County workhouse.

DR. AND MRS. JULIUS WEHRMAN sailed for Europe, July 7. While in Vienna Dr. Wehrman will take a special hospital course.

DR. J. RILUS EASTMAN sailed July 18, on the Imperator for London, England, where he will address the Clinical Congress of Surgeons.

DR. W. CLEVINGER and Dr. T. C. Hood left July 28 for London, England, to attend a conference of the North American Surgeons, which will take place the latter part of July.

THE new St. Francis Hospital was dedicated July 5 and was opened to receive patients July 10. The building is 197 by 48 feet, of fireproof construction, and will accommodate one hundred patients.

DR. FRANK WYNN, a member of the Mazam Club, an organization devoted to the sport of mountain climbing, will spend the month of August with other members of the club climbing to the summit of Mt. Ranier, Wash.

DR. CHARLES A. PFAFFLIN sailed July 30 for Berlin, Germany, and will spend the rest of the summer in the hospitals of Europe. Mrs. Pfafflin

and daughter Hope, who have been abroad several months, will return the last of September with Dr. Pfafflin.

THE City Council has authorized a loan of \$77,000 for the city Board of Health. Of this amount \$12,000 will be used by the recreation department. The money will be borrowed for four months, after which time the regular revenue will be available.

THE new pure milk clinic was opened July 9, under the direction of the Indianapolis Children's Aid Association at the College Mission Settlement, Haughville. Clinics are held each Monday and Thursday from 8:30 to 9:30 a. m., in charge of Dr. Frank McCool.

AFTER an intermission of a month, the free clinics of the Hillside Christian Church for the treatment of diseases of the eye, ear, nose and throat was resumed July 10. Free clinics for children are conducted by Dr. Homer W. Cox on Tuesdays and Thursdays from 2 to 4 p. m.

DR. EUGENE B. MUMFORD, who recently has returned from postgraduate work in the East, director of the milk clinic of the Children's Aid Association, has started a training school for nursemaids. They expect to train girls of good character to keep babies well, but not to take care of sick children.

THE city Board of Health, Indianapolis, is contemplating the purchase of additional property facing the City Hospital. The lot, 60 feet wide by 120 deep, is owned by the Indianapolis Free Kindergarten Association and is being used by the hospital for the purpose of housing patients suffering with contagious diseases.

FORTY-THREE applicants, including three women, took the examination for state license which was conducted recently by the State Board of Medical Registration and Examination. Two of the applicants are osteopaths. The women physicians applying are Miss Dorothy Storek, Indianapolis; Miss Thyra H. Josselyn, Madison, and Miss Evelyn Hyatt, Washington.

DR. VIRGIL H. MOORE, Chicago, A.B., Friends University, Wichita, Kansas, '09; A.B., Kansas State University, '10; M.Sc., Kansas State University, '11; M.D., Rush Medical College, 1913, has been appointed acting head of the Department of Pathology, Indiana University, with the

title of Assistant Professor of Pathology. Since his graduation Dr. Moore has been an instructor in the University of Illinois. Dr. Moore has had five years' experience as research worker and teacher in pathology. Among other honors, he obtained the J. W. Freer Medal and First Prize for Research, Rush Medical College, 1912 and 1913, and Rush Medical Scholarship, First Prize, 1912.

DRS. H. R. ALLEN, H. H. Wheeler, F. W. Foxworthy and G. H. Pendelton are returned from their summer vacations in Michigan. Drs. T. B. Noble and W. P. Garshwiler are spending their vacation in northern Wisconsin. Dr. Amelia Keller Beuhler is at Bethany Park. Drs. Thomas Hood, W. F. Clevenger and Rilus Eastman are spending their vacations in Europe. Dr. Chas. E. Cottingham is fishing in the lakes of northern Indiana. Dr. Chas. D. Humes is spending his vacation in playing tennis in northern Indiana and Pittsburgh. Dr. David Ross spent his vacation in traveling in the East. Dr. M. F. DeVaney takes week-end motor trips throughout Indiana for his vacation. Dr. William S. Tomlin spent his vacation in northern Michigan. Dr. Frank B. Wynn is spending his vacation along the Pacific coast in mountain climbing.

DR. GEORGE S. BOND of Richmond, Ind., B.S., Earlham College, 1903; A.B., University Michigan, 1904, and M.D., University Michigan, 1908, has been engaged by the Medical Department of Indiana University as Assistant Professor of Medicine. He will for two years devote his entire time to research work, and in addition will teach Medical Anatomy and Physical Diagnosis in the Medical School. He will also have charge of the electro-cardiograph station at the Robert W. Long Hospital. Dr. Bond is to give his entire time to school work for two full years, after which time he may enter consulting but not general practice. Since his graduation Dr. Bond has been associated with the teaching staff at Johns Hopkins University, particularly in research work in physiology and in the electro-cardiograph station. The installation of such an apparatus by the university in charge of an experienced man insures advanced and perfect methods of teaching cardiovascular pathology.

THE graduates of the Medical Department, Indiana University, 1914, have located as follows: City Hospital, Indianapolis, with competitive standing in the order named: Drs. Moore, Danruther, Bartley, Markwell, Martin, Shiel, Cahal, Jones, Savery, Nimal, Jackson, Aldrich.

Deaconess Hospital: Drs. Kirklin and Tucker. St. Vincent's Hospital: Drs. Holt, Nolting and Lochry. Robert W. Long Hospital: Dr. Cast. Lafayette Hospital: Dr. Cekul. Woman's and Children's Hospital, Syracuse, N. Y.: Drs. Hiatt and Brill. Dr. Van Sandt is practicing with his father at Carbon, Ind. Dr. George Boesinger has been engaged by the university as instructor in pathology. Drs. Davis and Bartlett have not yet located. It will thus be seen that 91 per cent. of this class has entered hospital service and only one has begun private practice. It is interesting to note the very large per cent. of the graduates who voluntarily take hospital service and clearly indicate that when the fifth year is made obligatory, as it no doubt soon will be, no hardship will ensue as the result of this requirement. So far as the Medical Department of Indiana University is concerned this question has already been solved.

GENERAL

THE house of Dr. R. B. Short, Bedford, was burned June 28.

DR. W. C. SQUIER, formerly of Princeton, has located at Milton, Ind.

DR. J. C. ARMINGTON of Anderson is spending several weeks in the West.

DRS. M. R. COMBS and F. H. Jett of Terre Haute are traveling abroad.

DR. WM. H. WARE of Clarks Hill is convalescing from a recent illness.

A NEW hospital for the city of Pennville is now in process of construction.

DR. GEORGE H. BURKE of Wabash is reported to be convalescent from a recent illness.

DR. CHARLES H. LOOMIS of LaPorte is reported to have recovered from a recent illness.

DR. W. C. CHAFFEE of Huntington, who has been seriously ill, is reported to have recovered.

DR. JAMES B. MAPLE of Shelburn and Miss Josephine Rettich were married early in July.

DR. F. P. BITTERS, formerly of Rochester, has taken up the practice of medicine in Greensburg.

DR. A. E. OTTO of Alexandria recently has been appointed secretary of the City School Board.

DR. GRANT GOODWIN of Monticello recently has returned home from a two months' vacation trip.

DR. W. C. SARBER and family of Argos spent a week in northern Michigan, driving through in their car.

DR. R. T. BLOUNT of Rushville, who has been ill for several weeks, is reported still in a serious condition.

DR. CHARLES VARIER of South Bend underwent an operation for acute appendicitis on July 12.

DR. J. A. CRAIG of Gary recently has returned from an extended western trip, having been gone several months.

THE Hixon eugenic marriage bill was lost in the Georgia Senate by a viva-voce vote after a spirited debate.

DR. J. M. MILLER of Decatur, who has been suffering from typhoid symptoms, is reported to be convalescent.

DR. AND MRS. J. E. DERBYSHIRE of Van Buren returned August 1 from a vacation among the northern lakes.

DR. W. C. MOSS, formerly of Winamac, who has practiced a short time at Plainfield, has returned to Winamac.

DR. A. A. RANG of Washington is recovering from injuries which he received in an automobile accident early in July.

DR. C. E. JOHNSON of Rensselaer attended several surgical clinics at the Mayo Hospital, Rochester, early in July.

DR. G. L. SHOEMAKER of North Manchester has suffered severely the last few weeks as the result of an injured knee.

DR. T. J. BOWLES, the oldest practicing physician in Muncie, celebrated his seventh-eighth anniversary on July 24.

DR. J. O. PAUL and family of New Lisbon have returned recently from a two weeks' camp-out vacation at Lake James.

DR. J. H. DEER of Zionsville, who has been at the Deaconess Hospital, Indianapolis, for several weeks, is reported convalescent.

DR. IRA E. BOWMAN of Odon, who has been suffering severely as the result of an infected hand, is reported to have recovered.

DR. E. B. MOSER of Windfall recently has been appointed a member of the Board of Pension Examiners of Tipton County.

DR. D. D. MACGILLIVRAY of Pine Village is taking a postgraduate course in the Chicago Eye, Ear, Nose and Throat College.

DR. CHARLES H. LOOMIS, LaPorte, who has been ill in Christ Hospital, Cincinnati, for several weeks, has returned to his practice.

DR. J. E. METCALF, president of the Gary Board of Health, has returned recently from a vacation trip spent at Fenimore, Wis.

DR. H. A. BECK of Lebanon recently has returned from a ten days' motor trip among the lakes in the northern part of the state.

DR. A. H. SHAFFER of Huntington recently has resigned as a member of the board of pension examiners of Huntington County.

DR. L. W. ARMSTRONG and family of Danville arrived home the latter part of July after a four weeks' outing at Mountain Park, Md.

DR. D. J. HOLLAND of Harrodsburg recently was severely burned while filling his auto with gasoline. A lantern caused the explosion.

THE year 1914 has been the banner year for immigration and it is estimated that the total for this year will reach at least 1,355,000.

DR. F. H. FERGUSON, formerly of the Samaritan Hospital, Nappanee, and more recently of Chicago, has opened a hospital in Ligonier.

DR. GEORGE R. CLAYTON of Monon attended the annual meeting of the surgeons of the Monon Railroad, held at French Lick, July 21.

DR. AND MRS. JAMES A. RAWLEY of Brazil, who have been critically ill as a result of ptomain poisoning, are said to be recovering slowly.

DR. JOSEPH MAURER of Marion recently has returned from Chicago, having spent three weeks attending eye and ear clinics in the hospitals there.

DR. AND MRS. J. D. McCANN of Monticello spent ten days visiting eastern cities, including Atlantic City, Newark, New York and Philadelphia.

A VIGOROUS war of extermination against the rat is being conducted in New Orleans, following the development of additional cases of plague in that city.

DR. Z. C. WOLFE of Corydon was re-elected state medical examiner for the Modern Woodmen of America for Indiana at their recent meeting held at Toledo.

DR. CHARLES S. DRYER, son of Dr. D. W. Dryer of LaGrange, has accepted a position as first assistant to Dr. J. C. Oliver of Cincinnati for the coming year.

JOHNS HOPKINS UNIVERSITY has just acquired a remarkably fine set of thirty-seven ancient Greek surgical instruments, found near the ruins of Kolophon, Ionia.

THE next meeting of the Ohio Valley Medical Association will be held in Evansville, Nov. 4 and 5, 1914. Dr. Benj. L. W. Floyd of Evansville is secretary of the Association.

THE medical section of the American Life Convention will meet at the Hotel Adolphus, Dallas, Tex., Oct. 6. Dr. F. W. Foxworthy, Indianapolis, is one of the board of managers.

DR. A. C. BARTHOLOMEW, formerly of South Bend, has purchased the practice of Dr. Willard Montfort, eye, ear, nose and throat specialist, at Van Wert, Ohio, and located at that place.

DR. AND MRS. H. G. WIESS of Rockport returned home early in July following an eastern trip including Atlantic City, Washington, Baltimore, Philadelphia, New York City and Niagara Falls.

DR. CHAS. C. CRAMPTON of Delphi was elected president of the Association of Surgeons of the Monon Railroad at their recent meeting at French Lick Springs. The next meeting will be held at Louisville, Ky.

THE Children's Dispensary and Hospital Association of South Bend was incorporated July 3 with the following directors: Drs. Charles E. Hansel, Roscoe L. Sensenich, Hugh M. Miller, Edwin J. Lent and others.

THE annual meeting of the Canadian Medical Association was held at St. John, N. B., the week of July 9. The annual meeting of the Canadian Medical Protective Association was held in connection with this meeting.

DR. JOSEPH D. HEITGER of Bedford was married July 15 to Miss Katherine Everbach of Louisville, Ky. After spending some time in northern Michigan they are at home at 1210 West Fifteenth Street, Bedford, Ind.

A PORTABLE cottage for tuberculosis patients has been erected in Goshen by the Elkhart County Anti-Tuberculosis Society. A second one has been donated by the manual training school of Bristol and will be erected soon.

THE Sunday before the Lafayette session will be observed as "Health Sunday." Prominent physicians over the state will be asked to fill the pulpits in the churches on that day, addressing the congregations on public health matters.

DR. C. C. RAYL, formerly of Monroe, recently returned from an extended visit in Europe where he spent his time in postgraduate study. Most of his time was spent in the clinics in Berlin. He will make a specialty of gynecology and abdominal surgery.

A REPORT made by John C. Diggs, water chemist for the state Board of Health, shows that the city water supply of North Vernon, Ind., is entirely unfit for domestic needs of the city and some method will have to be adopted at once to give the people pure water.

IT is reported that the new Milwaukee Radium Hospital will require every nurse employed to provide a bond of \$100,000. This step has been decided on in view of the need for protecting the radium, of which the institution will have one-eighth of the world's supply.

DR. D. A. RHINEHART of the Department of Anatomy of the Indiana University School of Medicine, Bloomington, has resigned his position to accept that of head of the Department of Anatomy in the Medical School of the University of Arkansas, Little Rock.

DR. BURTON A. THOMPSON, Kokomo, health officer of Howard County, is about to issue a book on the care of infants—their food, clothing, baths and common diseases—for free dis-

tribution among mothers, with a view to cutting down the death-rate among children.

At the meeting of the Northern Tri-State Medical Association, held July 13 at Lima, Ohio, the following officers were elected: President, Dr. Duncan, Toledo; vice-president, J. C. Fleming, Elkhart; secretary, George W. Spohn, Elkhart; treasurer, J. H. Weitz, Montpelier.

THE new hospital of the Indiana State School for Feeble-Minded Youth, Fort Wayne, will be opened to the public about September 1 of this year. The building has been in course of construction for the last year and its cost is \$200,000. This will be the finest state hospital in Indiana.

DR. ADA McMAHON of Lafayette, chairman of the Health Committee of the Indiana Federation of Women's Clubs and donor of the McMahon Prize which is to be awarded soon to the women of Indiana University, sailed late in July for London to attend the Clinical Congress of Surgeons.

THE Gary General Hospital, which has been in the hands of a receiver for some time, was sold recently to Miss Mary Pritchard, who has been superintendent of the hospital since it was established. Miss Pritchard will remain in charge and she announces that no change will be made at present.

At a special meeting of the Tippecanoe County Medical Society, June 28, special arrangements were made for the entertainment of the Indiana State Medical Association. Dr. George F. Kieper is head of the local committee on arrangements. The clinics will be under the direction of Dr. Frank B. Thompson.

AFFIDAVITS against Mrs. Ada Converse and Miss Edith Cloyd, Christian Science practitioners, charging them with violating the state law by practicing medicine without a license, have been filed at Richmond. The reason of this was the death of Dorothy Murray, a 5-year-old girl, who died of diphtheria and had been treated by them.

As a result of experiments, the specialists of the Department of Agriculture have discovered that a small amount of ordinary borax sprinkled daily on manure will effectively prevent the breeding of the typhoid or house fly. Similarly, the same substance applied to garbage, refuse, open toilets, damp floors and crevices in stables,

cellars or markets, will prevent fly eggs from hatching. Borax will not kill the adult fly nor prevent it from laying eggs, but its thorough use will prevent any further breeding.

WE have received a number of personals concerning doctors who are reported as having made arrangements to sail for Europe during August or September. But in view of the European war, we have concluded that these trips have been abandoned, and accordingly we are not including notice of them in the news notes this month.

THE American Roentgen Ray Society will meet in Cleveland at the Hotel Hollenden on Sept. 9 to 12, inclusive, 1914. The program, which promises to be of unusual interest and value, includes a paper by Dessauer of Frankfort on the subject of artificial production of gamma rays; Coolidge, the inventor of the Coolidge tube, Shearer and Duanne will also read papers. The subject of deep therapy and the production of the hard rays will be fully presented and discussed. The rest of the program will be taken up by a large number of papers on general subjects. The medical profession is cordially invited to attend these meetings.

THE Indiana Society for the Prevention of Tuberculosis has filed articles of incorporation with the secretary of state on account of the fact that some unknown person, living outside the state of Indiana, has decided to bequeath the bulk of his property to the society. The headquarters of the organization will be in Indianapolis and there will be thirteen directors, one from each congressional district, as follows: Mrs. George P. Decker, Evansville; Dr. A. A. Rang, Washington; Dr. Henry B. Shacklett, New Albany; Miss Mary Kennedy, Lawrenceburg; Professor L. J. Rettger, Terre Haute; Dr. S. Edgar Bond, Richmond; Mrs. Jacquelin Holliday, Indianapolis; Miss Luella Anderson, Muncie; Dr. Fred Dennis, Crawfordsville; Dr. C. B. Nesbit, Valparaiso; Mrs. E. W. Shirk, Peru; Dr. E. A. Crull, Ft. Wayne; Dr. J. A. Snapp, Goshen.

THE following bequests and donations have been announced recently:

Associated Jewish Charities, Chicago, \$5,000; Home for Destitute Crippled Children, \$1,000; Michael Reese Hospital, \$2,000, by the will of Nathan Friend.

Beverly, Mass., Hospital, \$5,000 by the will of Miss Sarah Warner Clark.

State Sanatorium for Consumptives, Sabillasville, \$1,000 by the will of Mrs. Elizabeth Miller in memory of her son.

O'Conner Sanitarium, San Jose, Cal., \$25,000 by the will of Dr. G. W. Seifert.

Hebrew Orphan Asylum, Mount Sinai Hospital, Home for Aged and Infirm Jews and Young Woman's Hebrew Association, equal shares of \$81,016 by the will of Constant Mayer.

Massachusetts General Hospital, Boston, \$5,000 by the will of Susan C. Dove, Andover.

Boston Floating Hospital, \$1,000 by the will of Henry K. Barnes, Boston.

Philadelphia Home for Incurables, \$5,000; Children's Seashore Home, Atlantic City, Children's Aid Society, Pennsylvania Branch Shut-In Society, Philadelphia Sanatorium Association, Epileptic Hospital and Colony Farm, Oakburne, Pa., Lying-In Charity and Nurses' Training School, Rush Hospital, Philadelphia, Philadelphia Free Hospital for Poor Consumptives, Wills Eye Hospital and Germantown Dispensary, each \$2,800 by the will of Mrs. Jane S. Echternach.

THE ROBERT W. LONG HOSPITAL

The Robert W. Long Hospital, the hospital of Indiana University, is now ready for the admission of a limited number of patients. The third floor with its additional forty-four beds will probably be opened in another month. This hospital is prepared to receive citizens of Indiana requiring active medical or surgical treatment, also a limited number of obstetrical cases, preferably those with complications. Mental cases, cases with contagious diseases and patients with pulmonary tuberculosis whose sputum contains bacillus tuberculosis cannot be received. Cases with chronic or incurable conditions requiring chiefly institutional care (e. g., senility, locomotor ataxia, arteriosclerosis, etc.) can remain in the hospital only as long as there is some special indication for active treatment.

This hospital is primarily for the poor of the State of Indiana who are unable to pay anything at all for their care. Since, however, the hospital must in some measure be self-supporting, a limited number of those able to pay in part or wholly for their treatment will be received. There are a few (only sixteen) private rooms. The part-pay patients in the public wards will be expected to pay in proportion to their means.

The organization of the hospital is similar to that of other university hospitals, but since this is somewhat different from that of the private

and municipal hospitals of Indiana a rather detailed description follows, which applies only to the public ward patients. All patients in the public wards, whether full or part pay, are the patients of Indiana University School of Medicine. The Educational Committee of the Medical School is responsible for the direction of the professional work of the hospital. This committee consists of Doctors John F. Barnhill, Louis Burekhardt, W. D. Gatch, John N. Hurty, Frank F. Hutchins, Robert E. Lyons (Bloomington), William J. Moenkhaus (Bloomington), Virgil H. Moon, Frank A. Morrison, Burton D. Myers (Bloomington), John H. Oliver, William N. Wishard and Frank B. Wynn. The patients are under the immediate care of the medical and surgical residents. These residents are not "interns." Only those are eligible for appointment who have finished an intern hospital service. They live at the hospital and their duties are entirely limited to the hospital and medical school work. Their term of service is unlimited. They are directly responsible to the Educational Committee for the care of the patients. Each resident will have as his assistants at least two interns who are entirely responsible to him. The intern service is for one year. Appointments of the interns will be made by the Educational Committee. The teaching staff of the medical school will act in the capacity of consultants with the residents and as teachers of the medical students. The duties of these teachers will be assigned by the Educational Committee.

Patients may be referred to the public wards of this hospital by any physician in Indiana, either as free or part-pay patients. The resident, assisted by his intern staff, will assume their immediate care. The Educational Committee will determine what physician or surgeon shall act as the consultant in the case, in each case only the good of the patient and of the school to be considered.

In addition to the eighty-eight public ward beds there are sixteen private rooms. Any member of the teaching medical faculty of the University may use these rooms for his private patients and will have full care of such patients assisted by the residents. The privilege of using these private rooms may be extended to those physicians not belonging to the faculty at the discretion of the Educational Committee. It is understood that no patient shall pay any physician or surgeon a fee for medical or surgical service while in the hospital unless he pays for his hospital care an amount equal at least to the expense to the state for this care.

In connection with the hospital is the Training School for Nurses, the head of which is Miss Alice Fitzgerald. All pupils admitted to this training school matriculate in Indiana University, subject to all the entrance requirements of the College of Liberal Arts. This Training School for Nurses is a department of Indiana University. The courses given are to be of university grade. Information concerning the combined courses leading to the degree of Bachelor of Arts and Graduate Nurse can be obtained from Miss Fitzgerald.

The physicians of the state are cordially invited to refer to this hospital the poor patients needing its care.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION

PRELIMINARY PROGRAM INDIANA STATE MEDICAL ASSOCIATION, LAFAYETTE SESSION, SEPT. 23, 24 AND 25, 1914

Wednesday Evening, Sept. 23, 1914

- 7:00 p. m. Meeting of House of Delegates.
9:30 p. m. Smoker.

Thursday, Sept. 24, 1914

- 9:30 a. m. General Session.
1. Prayer.
 2. Address of Welcome by the Mayor of Lafayette.
 3. Address of Welcome by the President of Tippecanoe County Medical Society.
 4. Address by President Salb of Indiana State Medical Association.
 5. Symposium on Goiter.
 1. Diagnosis. 15 minutes. R. B. Weatherill, Lafayette.
 2. Pathology. 15 minutes (with lantern slide demonstration). L. T. Rawles, Fort Wayne.
 3. The Selection and Preparation of Surgical risks. 15 minutes. G. K. Throckmorton, Lafayette.
 4. Medical Treatment. 15 minutes. Weir M. Miley, Anderson.
 5. Surgical Treatment. 15 minutes. H. H. Martin, Laporte.
- Discussants: C. Stoltz, South Bend; E. A. Sturm, Jasper; Thos. Jones, Anderson.

SURGICAL SECTION

Thursday Afternoon, Sept. 24, 1914

- Surgical Tuberculosis of the Abdominal Cavity—V. A. Funk, Vincennes.
- Discussants: G. T. MacCoy, Columbus; Jewett V. Reed, Indianapolis.
- Local Anesthesia in Major Surgery—C. A. Beehtol, Marion.
- Discussants: C. M. Mix, Muncie, Chas. H. McCully, Logansport.

Why Surgery in Intestinal Stasis—A. P. Roope, Columbus.

Discussants: M. I. Rosenthal, Fort Wayne; T. B. Eastman, Indianapolis.

Modern Diagnosis of Kidney Diseases Amenable to Surgical Treatment—D. N. Eisendrath, Chicago, Ill.

Discussants: J. R. Eastman, Indianapolis; F. R. Charlton, Indianapolis.

Friday Forenoon, Sept. 25, 1914

Ectopic Pregnancy—Edgar Cox, Kokomo.

Indications for Cesarean Section—W. F. Howat, Hammond.

Discussants: J. B. Berteling, South Bend; W. H. Williams, Lebanon.

Diagnosis and Surgical Treatment of Goiter—Goethe Link, Indianapolis.

Discussants: C. P. Cook, New Albany; G. G. Graessle, Seymour.

A Series of Filiform Appendices (with lantern slide demonstration)—Harry K. Bonn, Indianapolis.

Discussants: G. G. Eckhart, Marion.

A Technic of the Roentgen Ray Massive Dose in Carcinoma of Deep Structures—J. N. McCoy, Vincennes.

Discussants: E. O. Lindenmuth, Indianapolis; H. O. Mertz, LaPorte.

MEDICAL SECTION

Thursday Afternoon, Sept. 24, 1914

The Position of the Normal Stomach with Observations on the Movements of the Diaphragm—Burton D. Myers, Bloomington.

Discussants: A. M. Cole, Indianapolis; W. A. Domer, Wabash.

Praetical Considerations of Modern Ideas in Otolaryngology—J. Heitger, Bedford.

Discussants: G. F. Keiper, Lafayette; L. F. Ross, Richmond.

The Education of the Public to the Early Recognition of Cancer of the Uterus—Bernays Kennedy, Indianapolis.

Discussants: J. W. Kelsey, Attica; H. H. Thompson, Noblesville.

The Management of Feeding Cases in Infancy—J. H. Taylor, Indianapolis.

Discussants: O. N. Torian, Indianapolis; G. R. Green, Muncie.

Friday Forenoon, Sept. 25, 1914

Better Obstetrics—H. D. Fair, Muncie.

The Abderhalden Test in Pregnancy—Jane Ketcham, Indianapolis.

Gas Anesthesia in Obstetrics—Arthur Guedel, Indianapolis.

Discussants: J. P. Ward, Vevay; L. Burkhardt, Indianapolis; R. E. Holder, Columbus; C. L. Cabalzer, Indianapolis.

Aids to Diagnosis in Pelvic Inflammation in Women—Ada Schweitzer, Indianapolis.

Discussants: W. H. Baker, South Bend; M. R. Combs, Terre Haute.

Thursday Evening

Dr. Victor C. Vaughan, President American Medical Association, will deliver an address to which the public is invited.

GENERAL SESSION

Friday Afternoon, Sept. 24, 1914

Modern Methods in Diagnosis and Treatment of Cerebrospinal Fever—W. D. Hoskins, Indianapolis.

Discussants: L. P. Drayer, Fort Wayne; J. N. Hurty, Indianapolis.

How to Improve the Standing in Pharmacy in Indiana—C. B. Jordan, Lafayette.

Discussants: A. L. Walters, Indianapolis.

The Technic of the Wassermann Reaction—Bernhard Erdman, Indianapolis.

Discussants: H. K. Langdon, Indianapolis; A. R. Simons, LaPorte.

The committee has spent a great deal of time and activity in order to complete the program for the August number of *THE JOURNAL*, this being for the expressed purpose of affording an opportunity and time for all those whose names appear on the program to thoroughly prepare themselves.

We would suggest that each essayist furnish a copy of his paper to his respective discussants that the latter may be both familiar with its contents, and allowed time to look up references that he may present his views in a clean-cut, up-to-date manner.

In many of our previous state meetings the whole program has been greatly disturbed and frequently demoralized by the essayist being absent or the discussant failing to respond. To be sure such occurrences are unavoidable at times. We would suggest when one whose name appears on the program finds he will not be able to be present that he notify the secretary of his Section so that provisions may be made to fill his place and avoid delay after the meeting has begun.

A. C. KIMBERLIN, Chairman.

FRANK B. WYNN,

CHAS. F. NEW.

INDIANAPOLIS MEDICAL SOCIETY

Meeting June 2, 1914. Washington Hotel

Meeting called to order by president. Application of I. H. Sonne read second time. Attendance 70.

PROGRAM

"The Treatment of Cerebrospinal Syphilis," a paper by Dr. C. D. Humes.

"Diagnosis and Treatment of Bone Infections," a paper by Dr. J. W. Sluss.

Leaders in the discussion were Drs. John R. Thrasher, C. E. Cottingham, S. L. Egart and Henry R. Alberger.

Dr. Thrasher reviewed what had been accomplished in 1913 relative to intraspinal treatment of syphilis.

Dr. Cottingham talked of the new treatment and how much more hope it offered to many sufferers than the old method of injecting bichlorid.

Dr. Egart showed a great number of roentgen-ray plates demonstrating various forms of bone infection, particularly tuberculosis osteitis. The plates were from among those made at the City Hospital.

Dr. Alberger stated that it was often difficult to make scientific diagnosis in bone affections. Also stated that blood cultures were coming more into general use as diagnostic agents.

Dr. Neu said there were two types of syphilis—one that responds and one that does not, tabes and paresis

coming in latter type. Stated it was just as necessary to make Wassermann of spinal fluid as of blood.

Dr. Beeler called attention to a new book by Sir Edward Shenton on roentgenology, mentioning one thing, namely, the author differentiated between osteoarthritis, which gives a clear shadow, and tuberculous arthritis, whose shadow is hazy.

Dr. Alberger reported a case of pneumococcal meningitis, showing the brain, right lung and liver. The lung demonstrated the three stages of pneumonia by the three lobes, respectively.

Meeting adjourned. ALFRED HENRY, Secretary.

Meeting June 9, 1914. Washington Hotel

Meeting called to order by president. Dr. I. H. Sonne was elected to membership. Attendance 52.

PROGRAM

Paper—"Nitrous Oxide in Obstetrics," by A. E. Guedel.

Paper—"Exudative Encephalitis: Clinical Manifestations and Pathology," by Dr. A. E. Sterne.

DISCUSSION

Dr. Ferguson: Nitrous oxide is expensive but rather efficient. It hurries labor, which is usually objectionable. Chloroform is passing because the authorities are against it. Ether has taken its place. It is efficient and works beautifully in last stage. Scopolamin and morphin are not safe. There are too many blue or white babies. In Freiberg it is given principally in first stage.

Dr. Neu: There is no reason why we should not have cell changes in brain any more than in any other tissues. There are many times a mild mental condition in which it is difficult to find definite physical changes. Treatment depends on etiology.

Dr. Emerson: Exudative encephalitis is an unfortunate term as it is already used in pathology. We have too few post mortems in America. The cause of the lesion is the important point.

Dr. Hodges asked the place of chloral in obstetrics. Dr. Ferguson replied he used it very little.

Meeting adjourned. ALFRED HENRY, Secretary.

ADAMS-WELLS COUNTIES

Joint meeting of the Wells-Adams Counties Medical Associations was held July 14, at Decatur, the Adams County physicians acting as hosts.

Meeting called to order at 8:30 by Dr. M. F. Parrish, president Adams County Society, and Dr. Severin, president Wells County Society.

Paper on "Infant Feeding in Health and Disease: A Comparative Study," by Dr. I. N. Hatfield. Discussion led by Drs. J. S. Boyers and M. F. Parrish.

Dr. C. L. Blue of Tosein presented a paper on "The Physician as a Man," and Dr. S. D. Beavers continued the line of thought with "The Physician as a Financier." These were followed by a general discussion.

After the scientific session the doctors and their wives and friends were delightfully entertained at the home of Dr. and Mrs. S. D. Beavers, and a reception was held in the parlors of the Presbyterian Church.

The purpose of the meeting, to promote intellectuality and sociability and to unite the two bodies more closely through better acquaintance, for a better and

higher mutual good, was more than realized, and the meeting was a most profitable and enjoyable occasion.

Adjourned.

S. P. HOFFMAN, Sec'y Adams County Society.

DELAWARE COUNTY

At the regular meeting of the Delaware County Medical Society, held July 3, 1914, a permanent committee composed of Drs. Malloy, Wadsworth and Spurgeon was appointed for the purpose of investigating and keeping in touch with the milk production of Delaware County, to cooperate with the Board of Health in securing a better milk supply, to help educate the people regarding advantages of pure, clean milk and to represent the Delaware County Medical Society in all matters pertaining to the question.

The committee on resolutions presented a tribute to the memory of the deceased wife of Dr. G. W. H. Kemper, and a message of sympathy to the bereaved husband, sons and daughter.

Dr. H. D. Fair, secretary of the society, read a paper entitled "Better Obstetrics," from which the following statements were gleaned:

The profoundest event in the life of any woman is the birth of her first baby. The woman who performs the important function of perpetuating the race is entitled to especial care and consideration in this, her period of stress, and the knowledge of her requirements and the skilful application of this knowledge is embraced under the general term, "obstetrics."

I contend that, other things being equal, a woman ought to be better mentally and physically, and should be healthier and happier after the birth of her first baby than before, and when this condition does not obtain, it is due many times to the fact that the obstetrician has not done his full duty when attending a woman who has trusted her immediate safety and future well-being to his supervision. No other branch of practice shows so great a contrast as is found between normal labor and that presenting difficult, abnormal or pathologic features. We must always be on the alert for emergencies, for I believe that labor, normal in all respects, is becoming more rare each day. All gross lesions of the genital tract should be repaired. The mother needs more than a superficial examination, and a perfunctory call following labor. The baby is entitled to a critical inspection. There have been instances where an imperforate anus and even a cleft palate were not noticed by the obstetrician. No obstetrician should have an arbitrary fee. If he tells a benedict that his obstetric fee will be \$10 or \$15 and then realizes that he has earned \$25, he has no one but himself to blame. We should have our parturient woman in best possible condition when her hour comes. Early detection of pathologic conditions enables us to combat them and prevent many grave complications. How often we have seen a young primipara with constipated bowel, swollen legs, violent headache and other manifestations of faulty elimination, who, when we chide her for not securing professional advice, reiterates the cruel lies kept in circulation by neighborhood grannies that "all women must expect such things." It is certainly wonderful how optimistic a couple of happy-go-lucky people can be, taking no thought for possible emergencies, trusting that Providence will intervene, deliver baby,

care for mother and pay the doctor. The modern hospital is the ideal place for the parturient woman. The fact that a woman stands a much better chance of being discharged, sound, well and happy is worth the additional cost of ten days in an institution. Another advantage is the opportunity of seeing how she and her baby are cared for by trained attendants. The good obstetrician must be able to correctly interpret his findings. He must not only be able to detect a contracted pelvis, but he must know the limits allowing a normal child to pass. He should not apply forceps when cesarean section would be safer and more humane.

I am not in favor of and never apply the abdominal binder while a woman is in bed. In most instances it is indicated during last weeks of pregnancy and after the woman is up and around house.

As strict cleanliness is just as essential in good obstetrics as it is in surgery, each of us should learn a practical routine and try to follow it in every instance. (Here Dr. Fair described his technic.) In exceptional instances breaks may occur in an established routine, but lapses should be eliminated as far as possible and all details worked out in every instance.

There is a vast difference between meddlesome midwifery, and the spirit of inactivity that allows a woman to suffer for twelve hours when skilled assistance could end her trouble in thirty minutes. Conditions should inspire our acts regardless of the hands of the clock.

DWIGHT M. GREEN, M.D., President.

MADISON COUNTY

The Madison County Medical Society met in the public library in Anderson, May 26, 1914, at 4 p. m.. President Dr. S. C. Newlin in the chair. Secretary asked consent of society to hold next meeting in Alexandria, making it a public meeting and devoting entire program to tuberculosis. Consent unanimous.

Dr. T. C. Kennedy of Indianapolis read a paper on "The Cancer Problem." The essayist said: "In order to make any headway against cancer must have a campaign of publicity. Medical societies should devote more time to this work, especially among its own members. Pennsylvania has done much work along this line. The most important thing is early diagnosis and treatment. The death-rate from cancer is increasing rapidly; it caused the death of 75,000 persons in 1911. There is no plausible explanation of this increased death-rate. It is a difficult matter to get patients to come early. Cancer is not contagious and seems to be a disease of the well-to-do. The average death age from cancer is 59 years. Ninety-five per cent. of deaths from cancer occur after 35 years; 86 per cent. after 45 years. Deaths from cancer are greater in Europe and America than all the rest of the world. Of individual countries Switzerland is the one where cancer is most prevalent. No positive claim should be made for any method of treatment until it has been tried on many hundred cases and extending over a long period of time. Surgery cannot become more radical as it has gone the extreme limit in the Wertheim operation for cancer of the uterus, and in the Halstead operation for cancer of the breast. We must find some auxiliary agent. Chemotherapy seems to be the most promising at this time. Erlich, who has been working along this line, says the beginning

of the end of the cancer problem is in sight, and it is to be hoped that this is true. Selenium has given some good results, but have seen no benefit derived from copper. Radium has also given some marked benefits, but is as yet in the experimental stage. In a few years it will have taken its proper place and will be of great value as a palliative agent if not as a curative one."

Adjourned.

Meeting of June 23, 1914

Meeting called to order by the president. Minutes of previous meeting read and approved. Dr. S. C. Newlin was elected delegate to the state meeting. Dr. Olive Wilson read a paper on "Bacillary Infection of the Kidneys in Infants," saying: "It is not difficult to recognize a case of urinary infection if one happens to think of it, but the difficulties surrounding all attempts at collecting urine of infants, especially girl babies, are not easily overlooked. A positive diagnosis can only be reached by microscopic examination. This type of infection is usually found in nurslings, and almost exclusively in females. The bacillus may reach the urinary tract (1) by ascending urethra; (2) from the blood-stream; (3) by penetrating walls of adjoining viscera during inflammation. The bacterium coli is usually the offender, eight out of ten in one author's experience. The bacteria are found in the freshly discharged urine. The urine actually becomes a medium for the growth of bacteria. It is very acid in reaction; looks like a bouillon culture of bacteria; the turbidity is due to presence of pus corpuscles and bacteria. The symptoms may simulate meningitis, malaria and other febrile diseases. If specimen of urine cannot be secured give hexamethylenamin grains, one every three hours, or the citrate of potassium, to alkalize the urine, when symptoms will clear up readily. Urine should be kept alkaline until colon bacillus disappears.

Dr. Schmauss reported two cases of gall-stones.

CASE 1.—Woman, age 54; gave typical symptoms of gall-stones for eleven years. From March 1, 1914, all symptoms referable to the stomach. Operation findings: gall-stones, head of pancreas enlarged. Seventy-two hours later, post-mortem findings: diverticulitis, right lobe of liver enlarged, mottled, with fatty infiltration.

CASE 2.—Woman, age 52, had gall-stone colic; first put her on medicinal treatment; later operated, removing gall-bladder. Good recovery.

Adjourned.

ETTA CHARLES, Secretary.

WARRICK COUNTY

The Warrick County Medical Society met in regular session at St. Charles Hotel, Boonville, July 14, with Dr. W. H. Mills in the chair.

Dr. W. W. Rhudy was appointed alternate delegate to the Indiana State Medical Association.

Dr. J. G. Hoover gave a talk on "Cholecystitis," which was followed by an interesting discussion by the members.

Dr. W. A. Hewins reported a case of chlorosis which was of much interest.

Dr. P. N. Hoover gave a report on a case of "Addison's Disease," which he presented before the society at previous meeting.

Adjourned to meet the second Tuesday in August.

E. L. YOUNGBLOOD, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1914, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

ARLCO-UREASE.—A standardized preparation of the ureolytic enzyme obtained from the soy bean. It decomposes urea into ammonia and carbon dioxide and is used in the estimation of urea in urine, blood and other body fluids. The ferment is added to a measured amount of urine and, after a time, the amount of ammonia formed is determined. Arlington Chemical Co., Yonkers, N. Y. (*Jour. A. M. A.*, July 11, 1914, p. 165).

UREASE-DUNNING.—A highly potent and standardized preparation of the ureolytic enzyme obtained from the soy bean. It decomposes urea into ammonia and carbon dioxide. It is used for the determination of urea in urine, the amount of ammonium carbonate formed from the ammonia and carbon dioxide produced is determined by titration with volumetric acid. Urease-Dunning is supplied only in the form of Urease-Dunning Tablets, containing 0.025 Gm. Hynson, Westcott & Co., Baltimore, Md. (*Jour. A. M. A.*, July 11, 1914, p. 165.)

ELECTRARGOL FOR INJECTION.—Ampules containing 10 Cc. electrargol in the non-isotonized condition. Comar & Co., Paris, France (*Jour. A. M. A.*, July 11, 1914, p. 165).

STYPTICK APPLICATORS, ALUM 75 PER CENT.—Sticks tipped with a mixture of alum 75 per cent. and potassium nitrate 25 per cent. Admitted to the Appendix to New and Nonofficial Remedies. Antiseptic Supply Company, New York. (*Jour. A. M. A.*, July 11, 1914, p. 165).

PROPAGANDA FOR REFORM

ROBINOL.—Robinol is a glycerophosphate mixture exploited by John Wyeth & Brother on the discarded theory that certain diseases are due to a loss of phosphorus from the body and that this phosphorus deficiency is best remedied by administration of glycerophosphates. There is no evidence that glycerophosphates when administered act differently than do inorganic phosphorus compounds. At all events, if phosphorus deficiency really occurs, it would be more rational to supply the needed phosphorus in the form of foods rich in phosphorus, such as milk and eggs (*Jour. A. M. A.*, July 4, 1914, p. 49).

SEVETOL.—There was a time when physiologists thought that fats were absorbed into the blood in the form of a fine emulsion. It is now known that fat enters the blood after having been split into glycerol and fatty acids, the latter being, to a large extent, combined with alkalies in the form of soaps. Making use of the discarded theory, Sevotol, put out by John Wyeth & Brother, is presented to the profession with the claim that it is a very fine emulsion of fat and because of this is readily absorbed. While Wyeth & Brother would have physicians believe that Sevotol is readily absorbed and digested, it is evident that the amount of Sevotol which can be taken is limited

not only by the power of assimilation, but also by the power of digestion (*Jour. A. M. A.*, July 4, 1914, p. 49).

TOOTH DETERGENTS.—While many tooth preparations are alkaline from the soap which they contain, it is probable that weakly acid preparations are to be preferred. As the antiseptics in tooth powders and washes do not remain in the oral cavity for any length of time, they cannot exert any beneficial antiseptic action. Antiseptics may even be harmful in that their periodical application may render the organisms which infect the mouth more hardy and vigorous (*Jour. A. M. A.*, July 4, 1914, p. 50).

DR. JIROCH COMPANY, A FRAUDULENT CONCERN.—The federal authorities have declared the Dr. Jiroch Company, 533 S. Wabash Ave., Chicago, fraudulent and denied it the use of the mails. This medical mail-order concern sent out a treatment which appears to have been the same no matter what the symptoms reported by the victim. Examination of the four kinds of tablets sent out, in the A. M. A. Chemical Laboratory, showed these to contain ordinary tonic and laxative drugs (*Jour. A. M. A.*, July 11, 1914, p. 179).

LITHIUM SALTS IN URIC ACID DIATHESIS.—There is no reliable chemical evidence that Lithium salts increase the excretion of uric acid by the kidneys, except as they exert a diuretic action. Experimental work has failed to show that lithium salts or the alkalis cause the absorption of deposited urates, gouty tophi, etc. The popular belief as to the action of lithia is founded on a misrepresentation of chemical facts. There is no reason why lithium salts should be expected to favor the solution of uric acid or urates in the tissues, the blood-serum or the urine (*Jour. A. M. A.*, July 11, 1914, p. 184).

WINE OF CARDUI.—While the Chattanooga Medicine Company asserts that in the manufacture of Wine of Cardui no more alcohol is used than is necessary to preserve it, experiments indicated that the preparation contains only water-soluble constituents and that a non-alcoholic preparation might easily be prepared. Also, despite the owner's assertion that Wine of Cardui cannot be used as a tippie, large doses were taken experimentally with no observable effects other than those of alcohol; further, letters from physicians assert that the preparation is used habitually, evidently for its alcohol effects—probably unconsciously. The exploitation of Wine of Cardui is vicious and the public should be apprised of the facts (*Jour. A. M. A.*, July 18, 1914, p. 258).

STRYCHNIN AND CAFFEIN IN CARDIOVASCULAR DISTURBANCES.—Aided by a grant from the Council on Pharmacy and Chemistry, Dr. L. H. Newburgh has made a painstaking study of the action of strychnin and caffein on cardiovascular disturbances. He concludes that, since the blood-pressure is not low either in persons showing grave symptoms of pneumonia or of those dying from that disease, and since it has been proved that the vasomotor arcs are normal in animals after death from pneumonia, it is logical to conclude that the vasomotor mechanism is not impaired in pneumonia. Strychnin does not improve or augment of the work of the heart in persons suffering from broken cardiac compensation. It could not be shown that either strychnin or caffein stimulated the cardiovascular apparatus in any of the conditions studied (*Jour. A. M. A.*, July 25, 1914, p. 311).

SODIUM FLUORIDE.—While the poisonous character of fluorides is recognized, the use of sodium fluoride as a food preservative is still considered. As a result of experiments, F. Schwyzer concludes that fluorine preparations are poisonous even when administered in very small doses (*Jour. A. M. A.*, July 25, 1914, p. 323).

VACCINE AND SERUM IN HAY-FEVER.—A serum for the treatment of hay-fever is described in New and Nonofficial Remedies. Theoretically there can be no vaccine treatment of this disease for the reason that it is produced, not by bacteria, but by the pollen of various plants. The use of vaccines derived from the micro-organisms found in the nasal secretion are still in the experimental stage (*Jour. A. M. A.*, July 25, 1914, p. 340).

BOOK REVIEWS

ESSENTIALS OF NERVOUS DISEASES AND INSANITY; THEIR SYMPTOMS AND TREATMENT. By John C. Shaw, M.D., and Louis Casamajor, M.A., M.D. Fifth edition, thoroughly revised. Philadelphia and London: W. B. Saunders Company. Price, \$1.00.

The first part of this volume, dealing with nervous diseases, has not been materially changed except to include the advances that have been made since the last edition.

The section on the psychoses has been entirely rewritten to conform to the modern ideas. This is an excellent compend of the subject.

A SYNOPSIS OF MEDICAL TREATMENT. By George Cheever Shattuck, M.D. Revised and enlarged. Boston: W. M. Leonard, Publisher, 1914. Price, \$1.25.

This is a brief outline of the treatment of the more common affections with which the general practitioner comes in contact. This includes cardiac insufficiency, nephritis, typhoid, rheumatic fever, lobar pneumonia, infections of the upper respiratory tract, peptic ulcer, acute gastritis, simple diarrhea and constipation. This is followed by a description of the properties, action, toxic effects, indications, contraindications, method of administration, dose and substitutes of twenty-eight of the more important drugs and therapeutic agents.

The little book is a valuable one for quick reference, contains nothing superfluous and a great deal of good therapeutic sense.

DISEASES OF WOMEN. Medical and Surgical Gynecology. By Charles A. L. Reed, A.M., F.C.S., M.D., Fellow of the College of Surgeons of America; Professor in the University of Cincinnati; Gynecologic Surgeon to the Cincinnati Hospital, The German Deaconess' Hospital, and the Jewish Hospital; former President of the American Medical Association; author, "Text-Book of Gynecology," "Marriage and Genetics," etc. Cloth, pages 944, with 448 illustrations in the text. D. Appleton & Co., publishers, New York and London, 1913.

Some eight years or more having elapsed since the appearance of Dr. Reed's former text on diseases of women, it would be more appropriate to consider the present volume as an entirely new work, rather than another edition of the previous one. Pathology and other laboratory methods of diagnosis, as well as surgical technic, have in this time made sufficient strides to warrant a much more extensive place in a text on this subject. Then, too, the field of gynecology

has more generally been given the right to include many phases of abdominal surgery and for this reason much of the material that appears in Dr. Reed's new book is presented in a number of good surgical textbooks. We have also come to realize that the field of obstetrics is so intimately associated with that of gynecology that no text-book on the latter subject is complete without a comprehensive presentation of obstetric surgery.

While the author disclaims any desire to impress the individuality of certain operations, we note with interest the careful pains taken to enumerate Reed's procedures for various clinical conditions to the amount of a dozen or more. It is but fair, however, to say that the procedures evolved by other men have been given equal space.

All told, the work is a comprehensive one and shows the master hand to a much greater extent than the author's previous volume on this subject.

PYORRHEA ALVEOLARIS. By Friedrich Hecker, B.Sc., D.D.S., A.M., M.D., Member of the Academy of Science of St. Louis, Mo.; Consultant at Bell Memorial Hospital of the School of Medicine, University of Kansas, Rosedale, Kan.; Consultant at St. Margaret's Hospital, Kansas City, Kan. Illustrated. C. V. Mosby Co., St. Louis, 1913.

This little monograph is very poorly written and contains many errors. The grammatical construction is faulty, and errors of spelling are numerous, e. g., toxema, p. 40; calcarious, p. 48; neutraphylic, p. 63; lathal, p. 80; inhibitory, p. 85; creasote, p. 98; hagdorn, p. 130. Other glaring mistakes are as follows: Kiasto is used where apparently Kitasato is meant; ampulla is used instead of ampouë; S. Albus is described as hemispherical, whereas, like S. Aureus, it also is spherical; and the dogmatic statement is made that S. Aureus is not saprophytic, whereas any one of experience knows that not all specimens of this organism are virulent. Such inexcusable errors, along with the fact that the book is crudely written, uninteresting, and that the illustrations are uniformly poor, speak for themselves. It need only be said that this is a good example of the poor quality of some of the medical works now offered to medical men.

A CLINICAL MANUAL OF MENTAL DISEASES. By Francis X. Dercum, M.D., Ph.D., Professor of Nervous and Mental Diseases, Jefferson Medical College, Philadelphia. Octavo of 425 pages. Philadelphia and London: W. B. Saunders Company, 1913. Cloth. \$3 net.

His extensive experience as a teacher of nervous and mental diseases has eminently fitted Dr. Dercum to present a practical volume to both student and practitioner which has been evolved through insight into present-day needs along these lines. There can be no question but that the medical profession as a whole is in dire need of reeducation along the lines of psychic disease, both as to diagnosis and prognosis, and particularly with regard to treatment. Unquestionably, we are all a little too prone to forget that the insane man is a sick individual, and the same holds true of the neurasthenic woman. The one we have been more or less content to condemn to institution commitment, the other to abandon to the christian scientist or other fadists. Were we able to analyze the psychic evolution throughout the various manifestations of insanities, or to so intrench ourselves in the confidence in our neurasthenic patients, as Dr. Dercum declares to be possible, there would undoubtedly remain

much less mental suffering and far hungrier asylums than now exist.

The work is eminently practical, concise and so compact as to avoid the tedium that is characteristic of many works along this line.

ESSENTIALS OF PRESCRIPTION WRITING. By Cary Eggleston, M.D., Instructor in Pharmacology, Cornell University Medical College, New York City. 32 mo of 115 pages. W. B. Saunders Company, 1913. Cloth. \$1 net.

In this little work the author can rest assured that he has accomplished his purpose in furnishing the medical student with a succinct and sufficient little manual for prescription writing, and particularly so when the use of this manual is combined with that of the Pharmacopeia and National Formulary.

OBSTETRICS. A Manual for Students and Practitioners. By W. P. Manton, M.D., Professor of Obstetrics and Clinical Gynecology, Detroit College of Medicine, Detroit, Mich. Second Edition, Revised and Enlarged, Including Selected List of State Board Examination Questions. 12 mo, 292 pages, with 97 engravings. Cloth. \$1 net. Lea & Febiger, Publishers, Philadelphia and New York, 1913.

To meet the demands of a very progressive specialty, this little work has largely been rewritten, but even yet it is met by the same fallacies that are the necessary accompaniment of every effort to condense a big subject into a little space. Experienced obstetricians are still somewhat at variance on many points of their art, and it is somewhat unfair to any author for his views to be placed before the student or practitioner as a single standard on which to rely. An instance of this is at hand when Manton states that the placenta may be expressed after the second or third post-partum contraction of the uterus. For an epitome, however, this little work on the subject is probably as good as any.

INFECTIONS OF THE HAND. A Guide to the Surgical Treatment of Acute and Chronic Suppurative Processes in the Fingers, Hand and Forearm. By Allen B. Kanavel, M.D., Assistant Professor of Surgery, Northwestern University Medical School, Chicago. New (2d) edition, thoroughly revised. Octavo, 463 pages, with 147 illustrations. Cloth, \$3.75 net. Lea & Febiger, Philadelphia and New York, 1914.

Any book that may serve to arouse the interest of the medical profession in the important subject of infections of the hand has a distinct value. As the reviewer is familiar with no other book that gives to this subject sufficient consideration, he feels that the volume by Kanavel should be in the possession of every one who is called on to treat hand infections.

Kanavel has done much to increase our knowledge of the anatomy of the hand, and about one-fifth of this book deals with the topic of anatomy, giving in detail the author's studies on this subject. This section of the book is profusely illustrated and the illustrations are generally good, although several could not exist without their legends.

Probably the most valuable portions of the work are those dealing with diagnosis. The greatest emphasis is placed on the necessity of differentiating tenosynovitis, and fascial space infection, as "their treatment is diametrically opposed." The author states that "in nearly every case an early diagnosis can be made and the function of the hand saved."

The practitioner can find in this book complete and exact description of the treatment of each type of infection. For prophylaxis the author advises the pouring of iodine into all fresh wounds and the application of a light sterile bandage for twenty-four hours. Kanavel employs hot moist boric acid solutions until the process is under control, and he drains with gauze strips thoroughly saturated with vaseline—he condemns the use of rubber tubes for drainage.

Regarding the frequently employed "prophylactic incisions," he states: "A general rule should be laid down not to incise unless the surgeon has an accurate appreciation of the condition and an absolute diagnosis made." The reviewer ventures the opinion that Kanavel could improve his very excellent results if he would more frequently employ Bier's "Stauungs-kyberämie." Were the author familiar with Kulenkampf's procedure for injecting the brachial plexus and the other methods for producing "Leitungsanästhesie" he would not advise the routine employment of a general anesthetic.

The book concludes with a valuable section on the complications and sequelae of infections of the hand. In brief, the work represents a thorough and satisfactory exposition of all aspects of its subject, written from the point of view of a large personal experience.

BLOOD-PRESSURE IN MEDICINE AND SURGERY. A GUIDE FOR STUDENTS AND PRACTITIONERS. By Edward H. Goodman, M.D., Associate in Medicine in the University of Pennsylvania. Cloth, 226 pages. Lea & Febiger, Philadelphia and New York, 1914.

This is an excellent work which gives a large amount of information concerning blood-pressure and its relation to diseased processes. The author very justly says that the blood-pressure apparatus is now as necessary as a part of the physician's equipment as is the clinical thermometer and the stethoscope.

After considering the physiology of blood-pressure and describing the instruments and methods for estimating it, the author discusses in a comprehensive way the variations of the normal blood-pressure and the reasons therefor. In separate chapters he discusses blood-pressure in cardiovascular disease, renal conditions, chronic infections and certain intoxications, nervous disorders, and some other less important conditions.

The book concludes with chapters on the treatment of hypertension and hypotension. Aside from giving his own experience, with its deductions, he quotes liberally from the writings of others, thus making the book a comprehensive and valuable work on the subject considered. It is worthy of a place in the library of every progressive physician.

ANATOMY AND PHYSIOLOGY. A Text-Book for Nurses. By John Forsyth Little, M.D., Assistant Demonstrator of Anatomy, Jefferson Medical College, Philadelphia. 12mo, 483 pages, with 149 engravings and 4 plates. Cloth, \$1.75 net. The Nurses' Text-Book Series. Lea & Febiger, publishers, Philadelphia and New York, 1914.

It is a difficult matter to combine in a volume of convenient size and adapted to the use of nurses the subjects of anatomy and physiology, and yet the author of this work has done it in an admirable manner. It is concise and yet presents all of the essential points which the nurse must have at command for the proper comprehension of her professional duties. Throughout

the work an attempt has been made to avoid unnecessary technicality and superfluous verbiage. The descriptions are clear and sufficiently comprehensive. Many excellent illustrations, some of which are in colors, add to the value of the work. A table of weights and measures and a glossary are additional features.

A PRACTICAL TREATISE ON MEDICAL DIAGNOSIS. For Students and Physicians. By John H. Musser, M.D., LL.D., late Professor Clinical Medicine, University of Pennsylvania; Physician to Philadelphia and Presbyterian Hospital; President American Medical Association, etc. Sixth Edition, Revised by John H. Musser, Jr., B.S., M.D., Instructor in Medicine, University of Pennsylvania; Assistant Physician, Philadelphia Hospital; Assistant Physician to Medical Dispensary of Philadelphia and Presbyterian Hospitals. Illustrated with 196 Engravings and 27 Colored Plates. Cloth, 793 pages. Lea & Febiger, Philadelphia and New York, 1913.

Eight years having elapsed since the last edition of this masterly work, there has been almost enough progress in medical diagnosis to warrant writing an entirely new book on the subject. But so much of excellence was contained in the way of description of practical methods of clinical diagnosis in the older work, that the author of the present edition is to be congratulated on having built on the old, yet firm foundation, a structure that is thoroughly modernized by the condensation of the retained data in such a way as to make room for the many newer diagnostic methods now so universally utilized. And withal, a volume has been constructed that is not so unwieldy and yet retains all the essential points of the old, together with a quite complete resumé of the newer diagnostic methods.

Cardiovascular and metabolic diseases, gastrointestinal and urinary disorders, all afford fields wherein so much diagnostic progress has been attained as to necessitate the addition of much new material.

One of the most interesting additions is that chapter dealing with the various functional tests of organic efficiency and among these it is gratifying to note the high place accorded to the phenolsulphonophthalein test for kidney function. It is quite natural that the data on laboratory diagnosis and disturbances of internal secretion should be materially elaborated in such a space of time.

Altogether, the volume bids fair to retain among modern standard texts on the subject the enviable position occupied in their time by the previous editions.

PRACTICAL THERAPEUTICS. Including Materia Medica and Prescription Writing, with a Description of the Most Important New and Nonofficial Remedies Passed on by the Council on Pharmacy and Chemistry of the American Medical Association. By Daniel M. Hoyt, M.D. Second Edition, Revised and Rewritten. C. V. Mosby Co. Price, \$5.00.

For the busy practitioner to keep abreast with modern therapeutics, necessitates frequent recourse to an authoritative text which includes the newer therapeutic agents and measures, with a description of their rational indications. The rapid increase in the armamentarium of modern therapeutics necessitates a frequent revision and rewriting of all the texts on therapeutics. In this volume the author has brought his

subject up to date and has included a complete list of the "new and nonofficial remedies" as well as a complete index of drugs for rapid reference. The print is easily legible and carefully avoids paragraphs of "fine print," which mar so many pharmacologic text-books. The text is clear and at first sight seems almost too brief. On the other hand, it unquestionably gains emphasis by its brevity, and certainly in no other subject is forceful definition so important.

The author very wisely omits many of the drugs included in the pharmacopeia, evidently believing that a few drugs well understood are immensely better than a vast number used at random. Arrangement of the text is excellent, the various drugs being grouped according to their pharmacologic action, and the description of each drug being arranged so as to show its physiologic action, toxicology and therapeutic application in order.

One of the new and most interesting features of the work is a chapter on proprietary medicines and dispensing, in which the composition of most of the common fake medicines is given, as well as the composition of many expensive drugs with patented names, for which the ordinary drugs of the pharmacopeia are perfect substitutes.

PRACTICAL SANITATION. A HANDBOOK FOR HEALTH OFFICERS AND PRACTITIONERS OF MEDICINE. By Fletcher Gardner, M.D., and James Persons Simonds, B.A., M.D. Illustrated. St. Louis: C. V. Mosby Company, 1914. Price, \$4.00.

A book dealing with the questions of practical sanitation which present themselves every day to health officers and practitioners of medicine had not been published to the reviewer's knowledge until this work appeared. Just a word as to the authors: Dr. Gardner is a captain in the Medical Corps, Indiana National Guard and Health Commissioner of Monroe County, Indiana. The duties of these positions bring him constantly problems of practical sanitation which are only occasionally encountered by the practitioner. His familiarity with these problems give him the proper point of view to present practical solutions for his fellow officers and practitioners. The other author, Dr. Simonds, is known to every doctor in Indiana by his very efficient work while superintendent of our State Laboratory of Hygiene. His training and experience both eminently fit him for undertaking a work of this character.

This book is divided into three parts. Part I takes up the management of epidemics, the various degrees of quarantine, isolation hospitals and camps, and the details of disinfection. This is followed by a brief description of each of the infectious (vegetable and animal) diseases with the essentials of diagnosis and the needful steps to be taken on their discovery. The method of grouping these diseases is to be commended highly for the object in view, the factors underlying this grouping being the avenues of infection and the methods of prevention. This grouping is purely tentative but should certainly be of material aid to the sanitarian. Part II deals with general sanitation and includes, among other subjects, school inspection, factories and workshops, anti-fly campaigns, the mosquito, disposal of garbage, and sanitary food inspection. Part III details the methods of obtaining specimens for diagnosis at the laboratory and, what is of great importance, the proper interpretation of the

laboratory report. An appendix gives schedules for sanitary surveys of cities, schoolhouses, hospitals and dairies.

The book is well-arranged, logical, and very practical. It is not burdened with discussions of the value of various sanitary measures. The measures recommended are those that have been found safest and they are presented in such a way that an intelligent lay health officer or school official will understand them.

The reviewer can recommend the book not only to practitioners of medicine and health officers, but also to superintendents of schools, as being the most practical book on the subject of sanitation of which he is aware.

A MANUAL OF X-RAY TECHNIC. By Arthur C. Christie, Captain, Medical Corps, U. S. Army; Instructor in Radiology and Operative Surgery. Army Medical School, Washington, D. C. Price, \$2.00. 104 pages, with 42 illustrations. J. B. Lippincott Co., Philadelphia and London.

As is stated in the preface, this work is intended as a condensed resumé on the subject of roentgenology such as will find a welcome place in the hands of any general practitioner who has only a limited time to devote to this field.

From this standpoint the work is most satisfactory, giving in a clear, concise way the principles on which the roentgen ray depends, the various forms of apparatus used to produce it, and a few of the commoner purposes to which it is put. There should be a distinct demand for just this sort of work.

THE PRACTICAL MEDICINE SERIES. Comprising Ten Volumes on the Year's Progress in Medicine and Surgery, Under the General Editorial Charge of Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume VII. Obstetrics. Edited by Joseph B. De Lee, A.M., M.D., Professor of Obstetrics, Northwestern University Medical School, with the Collaboration of Herbert M. Stowe, M.D. Series 1913. The Year Book Publishers, Chicago. Price, \$1.35.

So much of interest is encountered in this volume of Dr. De Lee's that it is almost useless to attempt to dilate on any number of topics. The first subject taken up, for instance, that of the influence of age on the first pregnancy and labor has been a much-discussed subject for many years, and more recently the opinion has been widely spread that age *per se* seems to exert little or no influence on the ease or difficulties of labor. However, from the data presented by the author in this volume the opposite stand is taken, namely, that those labors occurring in puerperae from 18 to 23 are easier and have fewer complications than either younger or older puerperae.

The author takes a very conservative stand regarding the serum treatment of hyperemesis gravidarum and warns against post hoc, propter hoc reasoning in considering this subject, for it has been his experience, he says, that many of the gravest symptoms of toxemia may be present and yet the tide turn for recovery under no other treatment than a psychic one.

In fact the whole volume is illuminated with extracts from the experience of a master obstetrician and the volume is probably one of the most desirable of the whole series.

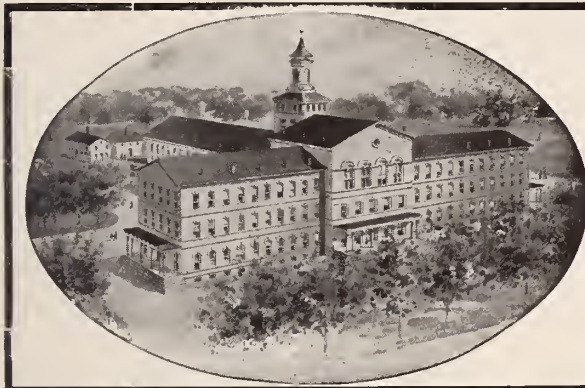


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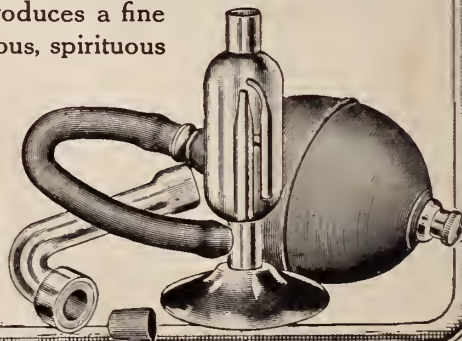
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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

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NUMBER 9

DIRECT LARYNGOSCOPY, BRONCHOS- COPY AND ESOPHAGOSCOPY WITH THE MODIFIED BRUNINGS BRONCHOSCOPE *

DANIEL W. LAYMAN, M.D.
INDIANAPOLIS

In the development and perfection of the bronchoscope Killian, Brunings and our own Chevalier Jackson have made the greatest strides, and this during the last decade. Gustav Killian can be called the father of bronchoscopy, as he developed both upper and lower bronchoscopy. He first successfully removed a foreign body from a bronchus in 1897.

Chevalier Jackson, in 1904 and 1905, cleverly designed a bronchoscope with an auxilliary tube for lighting purposes, and an additional tube for drainage. The Killian bronchoscopic tube, into which light is projected from an independent source, such as a frontal light, was used almost universally by the specialists abroad until Brunings perfected an electroscope for lighting purposes. The Jackson instrument with the light at the distal extremity of the tube has been more popular with the American specialists up to within the last year or two. Since then the Brunings instrument, or one of its modifications, seems to have become more popular. The Killian tube depends on a headlight for illumination, the Kirstein head lamp being the one most used. The lighting apparatus, the electroscope, of the Brunings bronchoscope consists of a lamp fixed outside the tube near its proximal end. To give this light great penetrative power, the rays are parallelized by employing lenses, through which the rays pass to a reflecting mirror. The advantage of the electroscope over the frontal lamp is that the eye is kept in position mechanically. Brunings' objections to inside lamps are that they

have very small penetrative power, that the fragility of the lamps render them dangerous, that they are easily soiled and cannot be employed with double extensible tubes.

The Shoonmaker instrument is much like Kahler's modification of Brunings' bronchoscope, the lighting attachment being practically the same. This bronchoscope consists of a common frame with handle, tubular spatula, main tubes and extension tubes. The upper end of the frame carries a small lamp and terminates in a lens for projecting the light onto the mirror. Below the lamp, fitted to the frame, is a metal collar supporting two arms which extend in opposite directions. One arm holds the mirror and the other terminates in a circular holder for the tube. At the lower end of the frame are two round openings at right angles to each other for the adjustable handle, which is held securely to the frame by a set-screw. The handle is adjusted parallel or at right angles to the frame, according to whether the examination is to be made with the patient in the sitting position or prone position of Boyce. An electric cable is attached to the end of the handle by means of a Wappler cystoscopic switch. One-fourth of a turn will switch the current on or off. The proximal ends of the spatula and tubes fit into the holder and are firmly fixed by a set-screw. The extension tubes, both bronchial and esophageal, are made to fit the main tube through which they slide. To the proximal end of the extension tube is attached a curved metal spring which is used to push the extension tube through the main tube. The spring slips through a groove on the inner side of the main tube, and the two tubes are made as firm and secure as a one-piece tube.

The concave mirror reflects parallel rays through the tube to the distal end, giving a bright illumination. The mirror is attached to the extension arm by means of a lever handle on a hinged joint which permits the mirror to be thrown to one side, away from the direct axis of

* Read before the Indiana State Medical Association at West Baden, September, 1913.

the tube for introduction of the extension tubes or instruments. It returns automatically to its proper position by releasing the hold. Instrumentation can be accomplished through the notch at the outer edge of the mirror without interfering with the light rays.

The anatomic knowledge of the trachea and bronchial tree is of the utmost importance in bronchoscopy. Such knowledge should include the form, location and relative sizes of the respiratory tubes. The tracheobronchial tree has the general form of an inverted "Y". The position of the bifurcation ridge of the trachea has an important bearing on endoscopic investigation, as there are variations in its angle. The trachea admits of quite a displacement, due to its fibro-elastic walls, traversed by spongy cartilaginous rings, and to its location amid extremely loose tissue and lung parenchyma.

The respiratory movements of the bronchi have to be considered. The main bronchi fall about 1 cm. with a maximum inspiration. Pulsating movements are transmitted to the tracheobronchial tree by pulsations of the heart and blood-vessels.

It is important to know the caliber of the bronchial tree in man, woman, child and infant. By that I mean the diameters of the trachea, glottis, right main bronchus and left main bronchus. By knowing the sizes of the tubular spatula and extension tubes in one's bronchoscopic outfit, instruments to fit the case can readily be selected. The table below shows the relative caliber of the bronchial tree, also the diameter of the tubular spatulas and extension tubes.

| | Man Diameters mm. | Woman mm. | Child mm. | Infant mm. |
|---------------------------------------|-------------------------|--------------|--------------|---------------|
| Trachea..... | 15-22 | 13-18 | 8-11 | 6-7 |
| Glottis | 12-15 | 10-13 | 8-10 | 5-6½ |
| Right main bronchus | 12-16 | 10-15 | 7-9 | 5-6 |
| Left main bronchus. | 10-14 | 9-13 | 6-8 | 5-6 |
| Tubular spatulas (Shoonmaker's) .. | 14 | 12 | 10 | 7 |
| Extension tubes.... | 11 | 9½ | 7½ | 6½ |
| Tubular spatulas (Brunings') | 12 | 10 | 8½ | 7 |

The Brunings instruments are proportionately smaller.

While the four different size tubes are made for man, woman, child and infant, it is sometimes necessary to use a different size altogether. For instance, if the caliber of the woman's glottis is only 10 mm. it will take only Shoonmaker's child's tubular spatula, which diameter is 10 mm. In practice it must be remembered that all parts of the tracheobronchial tree are capable of a considerable power of stretching. A child's larynx is more dilatable, yet one should exercise great care in taking advantage of this because

of the resultant subglottic edema due to traumatism. I am sorry to state that the instruments contained in the usual sets are not small enough for infants and small children. This accounts for the fact that tubes entirely too large have been used in these cases. Jackson successfully uses tubes of 4 mm. and 5 mm. internal diameter. Unless one develops the necessary technic to work with such tubes, a tracheotomy should be done rather than force a large tube through the larynx. A sloping tube spatula will enter the larynx better than Jackson's straight tubes.

Tracheobronchoscopy includes direct laryngoscopy and upper and lower bronchoscopy. The common indications for tracheobronchoscopy are:

First: The presence of a foreign body somewhere in the respiratory tract, as demonstrated either by a clear history or by radiograph, or by both. In lieu of either, the physical signs of stenosis of trachea or bronchi is an indication.

Second: Symptoms of pulmonary tuberculosis where tubercle bacilli have not been found, but where there may be a history of a foreign body having been swallowed and where there is present physical signs of tuberculosis at base of lung.

Third: Bronchiectasis.

Fourth: Every case of obscure dyspnea.

Fifth: Benign and malignant growths.

Sixth: Diseased condition of the respiratory tract, such as tuberculosis of larynx, asthma, etc.

When the history of the case is clear, even if the presence of a foreign body is not corroborated by the x-ray plate, symptoms or physical signs, an expert bronchoscopist of the Jackson or Killian type is justified in performing a tracheobronchoscopy.

Contra-Indications.—Some serious disease is the only contra-indication to tracheobronchoscopy for foreign bodies, such as heart lesion, arteriosclerosis with high blood-pressure, aneurysm of the aorta, etc.

Dangers of Tracheobronchoscopy.—Laryngeal edema and ill effects of the anesthetic are the most common dangers met with. Of course, prolonged manipulation of instruments can produce infection or profound shock. In lower bronchoscopy delayed some time after the tracheotomy has been performed there is danger of infection. Some of the dangers encountered if the foreign body is left alone are pneumonia, abscess, gangrene, bronchitis, bronchiectasis, sepsis and asphyxia. The mortality of these "let alone" cases is very high as compared to the mortality in the cases where tracheobronchoscopy has been performed.

The symptoms of foreign bodies in the air-passages are cough, dyspnea, temperature, chills,

hemoptysis and pain. The cough is the most constant symptom and is first due to irritation and later to inflammatory reaction. The dyspnea is first due to the obstruction caused by the foreign body and later to the secretions and to swelling of the tissues. If the temperature rises in the later stages it is due to toxemia from inflammation. The chill, like the temperature, appears in the later stages and is due to an abscess formation or septic absorption. Hemoptysis is dependent on the character of the foreign body. Pain is usually due to the coughing and also dependent on the character, shape and size of the foreign body. The physical signs vary according to the character and location of the foreign body.

Preparation of Patient.—The patient should be prepared as for any operative procedure. Such preparation should include, if time permits, a cathartic, rest in bed, and a thorough cleansing of the mouth by brushing the teeth and rinsing the mouth with a 30 per cent. alcohol solution. It is better to select a time when the stomach is empty.

Position of Patient.—In performing direct laryngoscopy on adults for diagnosis of some lesion or treatment, the sitting position is more convenient for the operator. In the foreign-body cases in adults the dorsal position should be used, on account of the assistance of gravity. The Trendelenburg position is even safer in cases where the foreign bodies are in the larynx or pharynx.

The Boyce position, where the head and shoulders are over the end of the table, is the best position for deep bronchoscopy, and is the favorite position used by Jackson. He claims that his success with it is due to his trained assistants. The assistant who holds the head of the patient sits to the right of the operator with his left foot on a small stool. His right forearm is extended beneath the patient's neck, which is thus supported, and his right hand holds the mouth gag. His left forearm rests on his left knee, and the patient's head is held in the assistant's left hand above the level of the table. With the patient in this position, the operator sits on a low stool at the head or end of the table instead of standing at the side.

The prone position of Dr. Johnston is highly recommended. In this position the patient is wrapped in a sheet and placed on a table. While the nurses attend to the legs and arms an assistant steadies the head, which is not necessary to be held too far back. The operator stands at the head of the table on the left side and manipulates the autoscope with the left hand.

guided by the thumb and forefinger of the right hand placed against the patient's upper teeth. This position is best suited for children and in cases of foreign bodies located high up in the respiratory tract or in the esophagus it is best for both children and adults. For deeper work, while Dr. Johnston starts with this position he shifts his own position to the end of the table, wherein lies a danger of traumatism to the tracheobronchial tract in making such a change.

In all cases of foreign bodies in infants and children the dorsal position is better, whether Boyce's or Johnston's, yet for diagnosis of diseased conditions, or sometimes for the removal of papillomatous growths, the adenoid position, wrapped in a sheet and held upright, is more convenient for some operators.

Anesthesia.—Anesthesia is used much less today in bronchoscopic work than it was formerly. A good rule to follow is: if anesthesia, general or local, can be dispensed with so much safer for the patient. Anesthesia is absolutely contraindicated if slightest dyspnea. In performing direct laryngoscopy in adults, either for diagnosis or treatment or extraction of foreign body, it is almost always necessary to cocaine the laryngopharynx by application of a 10 or 20 per cent. solution of cocain, mixed sometimes with adrenalin chlorid, one part in ten of the cocain. In case there is danger of dislodgment of the foreign body by application of the local anesthetic, it should be avoided altogether or used in a spray. In intractable patients it is better to precede the local anesthesia by a hypodermic injection of morphin, grains $\frac{1}{8}$ to $\frac{1}{4}$ and scopolamin, grains $\frac{1}{200}$ to $\frac{1}{150}$.

Esophagoscopy in adults can be performed for the most part without general anesthesia, that is, for foreign-body extraction or diagnosis. However, when it is necessary to secure a relaxation for the removal of a very large foreign body from the esophagus a general anesthetic must be used. The local anesthetic in esophageal work is limited to epiglottis and laryngopharynx.

Both in adults and children the tracheotomy necessary for lower bronchoscopy should be done under local infiltration anesthesia. In children under 8 years of age cocain is not to be recommended as it is dangerous and causes subglottic swelling. In older children an 8 per cent. solution of cocain, novocain or alypin can be applied cautiously. However, in younger children a general anesthetic should be given if absolutely necessary. According to Brunings the chloroform-oxygen anesthesia is the most favorable general anesthetic that can be given. Jackson thinks

well of ether for the commencement of the anesthetic on account of its stimulating effects. When general anesthetics have to be used the addition of oxygen is of special value. It clears up the breathing to such an extent that it often renders tracheotomy unnecessary in the case of acute obstruction to breathing, namely, laryngeal edema. In the laryngeal and bronchial cases ether is only used when chloroform is contra-indicated on account of the heart.

Jackson does not consider chloroform safe in esophageal and gastric work, where he says it is absolutely contra-indicated. Intratracheal insufflation anesthesia with the Elsberg apparatus is used quite extensively in the eastern hospitals.

Technic of Direct Laryngoscopy in Sitting Position.—Patient sits on a low stool 25 cm. high, with head slightly bent back and held by an assistant. The speculum is used first, as it affords a field of vision twice as great as the closed tube or spatula. The instruments are first disinfected with a carbolic acid solution, warmed and anointed with sterile ointment. The complete passage of the speculum or spatula is divided into three stages:

1. Presentation of lingual surface of epiglottis.
2. Passage beyond epiglottis.
3. Passing the tube deeper, possibly through the larynx.

The patient holds the tip of the tongue wrapped in a piece of gauze with right hand. The operator standing in front of patient, or preferably sitting on a higher stool than the one for the patient, passes the instrument with the left hand and uses index finger and thumb of right hand to protect upper lip and teeth, and also to prevent lateral displacement of tube, using the upper teeth for support. When the epiglottis is reached the operator elevates the autoscopic spatula over the epiglottis and pushes it down about 2 cm. when patient releases tongue. At the time the patient releases hold on tongue the head is turned further back. At the same time the surgeon exerts powerful pressure in a forward direction on the root of the tongue, but should not allow the tube to slip or move in further. With this forward pull a rotary movement about a horizontal axis situated in the middle of spatula obliterates the last vestige of the pharyngolaryngeal angle. Orientation is rendered much easier by patient uttering a continuous sound. The following landmarks are observed in successful direct laryngoscopy:

- First: Arytenoid cartilages.
- Second: Posterior commissure.
- Third: Vocal cords.

Fourth: Anterior commissure.

Fifth: Rings of trachea.

If the assistant holding the head makes counter pressure with the index finger on thyroid cartilage, the structures above mentioned are brought into view with less effort, at least lessens the amount of pressure necessary to exert with left hand. Passing the tube through the larynx is the most difficult feat of bronchoscopy, so mastery of the technic of direct laryngoscopy makes one more adept for the work in the bronchi.

As about 70 per cent. of the cases of foreign bodies occur in the period from birth to children up to 12 years of age, it is just as well to remember the difficulties encountered in their removal. These are:

First: Smallness of anatomic parts.

Second: Restlessness.

Third: Susceptibility to cocain.

Fourth: Increased salivation.

Fifth: Manipulation of instruments through small tubes.

The lower method of tracheobronchoscopy is technically much easier to perform, according to German authorities, yet Jackson claims no advantage in lower route. The frequency of tracheotomy after the age of 6 rapidly decreases, and it will become less frequent under 6 years as bronchoscopists develop technic in using smaller tubes. The indications of lower bronchoscopy as practiced by the average bronchoscopists are:

First: Tracheotomy wound already present. However, Jackson prefers upper bronchoscopy for all purposes, even if a tracheotomy shall have already been done.

Second: Where anesthesia is contra-indicated in dyspneic conditions.

Third: Difficult cases of removal of foreign bodies, on account of size, form, etc.

Fourth: In infants.

Fifth: Prolonged upper tracheobronchoscopy which has been unsuccessful.

If tracheotomy is necessary, do it early, under infiltration anesthesia, followed if necessary by local application of cocain to mucous membrane of trachea and bronchi in older children and adults.

Esophagoscopy is the examination of the esophagus with the aid of tubes introduced through the mouth. The esophagoscopist must be acquainted with certain anatomical points, most important of which are the length of the esophagus from the teeth to the cricoid cartilage, and also from the teeth to the cardia for the different ages. He must know the diameters at the constrictions, especially the opening through the diaphragm. The tubes usually used are the

10 mm. for adults and the 7 mm. tubes for infants.

The majority of the foreign bodies lodge in the upper end of the esophagus, that is, between the cricoid cartilage above and the clavicle below. The removal of foreign bodies from this position in the esophagus is accomplished with less trouble by placing the patient in the Johnson position, that is, with head straight on the table. In this position the muscles are relaxed, allowing a freer movement of the parts. The right angle of the throat is obliterated more or less by correct manipulation of the speculum or spatula. The new Jackson esophageal speculum is an excellent instrument for foreign body work and for operations on the upper part of the esophagus.

When bronchoscopes were first put on the market, most of the purchasers intended to use them only for foreign-body work. As there were more bronchoscopes than foreign bodies to be removed, a great many of these instruments remained unused. I do not believe I should have invested in one if its only service was to be for the removal of foreign bodies. My observations and reading in this line of work made me believe that the service the bronchoscope can render in diagnosis and treatment justified the purchase of an instrument for the performance of direct laryngoscopy, if for nothing else. Brunings states that bronchoscopes should be used more for diagnostic work than for any other purpose. At least, in his experience they are used twenty times for this work where they are used once for an operation. So I maintain that if not a complete bronchoscopic outfit, at least a working outfit should be owned and used by every laryngologist.

DISCUSSION

DR. A. B. KNAPP, Vincennes: I am afraid your committee made a mistake in appointing me to open this discussion. I have very little to say. The subject is entirely new to me and I am one of the unfortunate beings who cannot talk about a thing of which I know nothing. There is only one thing of which I wish to speak at this time, and that is the use of local anesthetics. I am surprised to hear the essayist say that he uses two to twenty per cent. of cocaine to obtain surgical anesthesia. I am sure that I have always been able to get the same results from a 2 or 4 per cent. solution that I could with anything stronger, by taking a little more time, and certainly with a greater degree of safety. Since I have used the weaker solutions for anesthesia, I have never seen any of the bad results that we get from the stronger solutions, because of the limited absorption.

DR. J. HEITGER, Bedford: In speaking of foreign-body work with the use of bronchoscopy, the

more of that work that I have seen done by the masters of it in this country, the more I am inclined to the opinion of Chevalier Jackson that it is really a specialty within a specialty, and that a great deal of our foreign-body work should be, so to speak, localized. That is, there should be at least one man within the radius of a certain number of miles who has the time to give to this work, and to whom all this work should be sent. No one man can do very much without a well-organized system of assistants. Anyone who has seen the work as done by Chevalier Jackson cannot leave without realizing what a great help a properly organized corps of assistants can become.

DR. F. V. OVERMAN, Indianapolis: I think there is a factor in this sort of work that Dr. Layman did not mention. I think he will agree that the training of the patient for the direct treatment, or application through the tubes, is a factor—a very great factor. The cases we have been observing recently in our clinic, at the beginning required a very strong cocaine solution—I think perhaps 10 per cent. was used. By treatment in these cases three times a week we observed that it was almost possible to do without the local anesthetic. In other words, the patients become accustomed to passing the tube. They get control of the muscles, the reflexes become lowered and the successful application was made with the use of a very weak solution.

DR. LAYMAN (closing the discussion): In regard to the local anesthetic, I believe in using a solution as weak as possible, but if one is very careful in using a 20 per cent. solution it only necessitates one or two applications; that is, where one uses a solution of 2 or, say 4 per cent., it requires four or six or sometimes more applications, and in case of an examination the application of the cocaine actually wears your patient out before you can operate or inspect the condition. So I think, if one is very careful in applying this solution, so that it does not drip, and applies it to the laryngopharynx, and is at the same time acquainted with the general condition of the patient, he will have very little trouble with the 10 or 20 per cent. solution.

As Dr. Heitger says, one should not attempt to treat these cases unless he is an expert—more or less. But, as I said in my paper, I think every laryngologist should learn to do a direct laryngoscopy, to make an examination of the larynx and trachea and upper part of the esophagus, and be prepared to do any treatment or any foreign-body operation of that part. Of course, we cannot all become expert, like Jackson or some men in Chicago, but we can familiarize ourselves with this subject to such an extent that we can use the bronchoscope for, as I said, the upper work, and only in case of absolute necessity—by that I mean to save the life of the patient—

to do the other. To become successful in passing the tube is one of the most difficult feats in bronchoscopy.

If I had a case of foreign body in the bronchi and the people could well afford to have an expert, and providing the case was not an urgent one, I would certainly recommend them to go to Pittsburgh or Chicago because I do not think we have enough of those cases here to make one adept in all this work, that is, in overcoming the complications that arise in performing the work.

Dr. Overman mentioned the training of patients. That is very essential, and I have noticed it in a number of cases where I passed the tube. I think the difficulty in first passing the tube is largely due to the fear of the patient. I did not have time to go into all the details that a paper of this kind would bring out and cover the ground thoroughly, but it is a very important point to remember in these cases.

PREVALENCE AND MANIFESTATIONS OF MALARIA *

GEORGE D. MARSHALL, M.D.
KOKOMO, IND.

F. Löeffler, in historical review of malarial diseases, in *Modern Clinical Medicine*, writes as follows: "At the dawn of the new century, in surveying the acquisitions due to medical research for the benefit of mankind, we must acknowledge that among them, one of the most practical and most significant was the elucidation of the origin, distribution and successful combat of that group of diseases which is the most widely disseminated of all infectious diseases," viz., malaria.

Hirsch in his great historico-geographic pathology has exhaustively described the geographical distribution of malarial diseases. The outlines encompass the whole of the United States and dependencies, except the north part of Alaska and the north part of Maine.

The history of malaria teaches that severe pandemics of the disease develop from endemic regions, and that after such epidemics a marked retardation has been observed, even in its endemic regions.

In the works of various authors devoted to the discussion of the disease, endemic regions are reported from every continent. The death toll in Asia is very high. In India the deaths in an ordinary malarial year are about one million, and in severe malarial years reach five or six

millions, costing the English government immense sums annually. The loss of life due to this disease is impossible to estimate with much accuracy, in any country, and much less so where vital statistics are not even attempted.

Howard estimates the annual economic loss to this country as one hundred million dollars, considering deaths, loss of time by the wage-earner, care of the sick, and such expenditures as sickness involves.

Celli shows that the economic loss to Italy has been enormous, in addition to that incurred as a direct result of malarial infections. He says that the existence of the disease has been responsible for five million acres of the most fertile land in the country remaining uncultivated.

A study of the history of malaria convinces one that in death-toll and economic losses it has been a world scourge, unequaled by any other disease.

Dr. Ada Schweitzer in a paper read before the Indiana State Medical Association at Ft. Wayne in 1910, reviews the history of malaria in Indiana. During 1819 an epidemic appeared, causing more fatal sickness during the following three or four years than has been known before or since in the Middle West. Many towns were almost depopulated. In Indianapolis alone seventy-two deaths occurred, a loss of one-eighth of the entire population in one year. In the summer of 1845, according to Dr. P. H. Jamison, hardly one person in six escaped infection. The epidemic of 1854 and 1855 was even more widespread than the preceding ones, every part of Indiana being affected to a greater or less degree.

Epidemics have been reported by men still actively engaged in practice as occurring at various times in the past. Dr. Schell styled the Wabash Valley "One of the most famous malarial districts in the world." Drs. Pantzer and Potter reported the study of cases in 1892 and 1893.

From the history of the disease in Indiana it may be noted that this state has never been free from malaria any considerable length of time, and it may be classed as an endemic region. Meteorological conditions seem to have very little to do with the occurrence of epidemics, as in the years 1854 and 1855, the summer of 1854 was extremely hot and dry, and in the summer of 1855 the rainfall was extremely abundant, yet during both years malaria was unusually prevalent and very fatal.

Seasons do not control the occurrence of malarial symptoms, as shown by Kourlow's ex-

* Read at District Meeting, Mudlavia, Ind., May 21, 1914.

perience at Tomsk, in Siberia, where malarial infection is observed in March and April, while the temperature is still below freezing point, and no mosquitoes are to be found at that season. Similar observations have been reported from other points in Siberia.

C. J. Stedman reported a case in which the only manifestation of malaria was a very severe headache, occurring periodically and readily cured by quinine. There was entire absence of fever, and the attack occurred in Alaska in the middle of winter, so that no suspicion of malaria was at first aroused in the mind of the medical attendant. The patient gave no history of previous malarial attacks, although plasmodia were abundant in the blood.

Since 1907 I have studied the prevalence of mosquitoes with regard to the presence of anopheles. During the summer I made frequent visits to ponds and sloughs in the evening, when the mosquitoes began to rise from resting places in grass and weeds. By the use of a net, fixed to a handle about three feet long, large numbers of them were caught. There would be but a small per cent. of anopheles in mosquitoes caught in this way.

In October I caught twenty mosquitoes that had just swarmed from a grape arbor in my yard, and of these, eighteen were male anopheles and two male culex. As the males are not blood suckers but exist on vegetable matter it is quite natural to assume that equal numbers of females were searching for animal food.

During the late summer and fall of 1908 mosquitoes were such a pest in Kokomo as to make sleep almost impossible. Late in October of that year the local health board poured several barrels of oil in the creek above the city in a vain attempt at relief from the pest. The futility of this procedure is apparent, as the mosquitoes were already hatched, and as the oil flowed down the creek, the most favorable breeding places were not affected.

Mosquitoes have been present in large numbers every year. Culex swarm about eaves and to leeward of shrubs and trees of evenings in such numbers as to make the air black with them.

Search for anopheles is a hand-to-hand conflict, and is best made in daytime when they are to be found in shady places, such as afforded by shrubs and growing vegetation, although I have found them on white plastering in an upstairs room on many occasions, also on door and window screens. They breed in the same breeding places with culex, and may be distinguished in the pupa stage by their horizontal

position when breathing, also their dark color as compared with the pupa of Culex.

I have observed culex and anopheles pupae in a discarded glass dish, and by transferring contents to a fish jar, and covering with gauze, placing a stick inside for a perch, obtained the newly hatched anopheles. During the late summer and fall of 1913 I could catch several anopheles in my garage any morning.

Craig states, from personal observation in the Philippine Islands, that he is satisfied that anopheles will fly from two to two and a half miles in search of food. Observations recently carried on by LePrince in the Canal Zone show that certain anopheles will fly long distances, and he has captured marked specimens six thousand feet from the point of their liberation, while several specimens stained near their breeding places were found in the same location two weeks later. It has been stated that the insect will seek, for the deposit of her eggs, the same breeding place from which she originated, and that this choice of breeding place will be sought for several succeeding generations.

Once the resting place of anophelinae is found, daily inspection will reveal them in increasing numbers as the season advances. They can be easily caught by setting a common drinking glass over them, then sliding the glass to disturb them, when they will fly back into the glass and the hand can be slipped over the glass to retain them. By the aid of a piece of gauze or a handkerchief they can be caught in the glass and placed in a glass vial or other receptacle. I have often been able to set a glass over two at one time.

The employment of Italian laborers has no doubt played an important part in the distribution of malaria, as these men came from the hotbeds of malaria in Italy, and were employed at construction work, quite often along waterways, and as they were poorly housed any gamete carriers would be exposed to and infect anopheles if any were present.

The Spanish-American war was another potent factor in the distribution, as most neighborhoods furnished one or more recruits who returned home with the plasmodia in their blood. Craig found 307 latent cases out of a total of 1,297 soldiers invalided home from the Philippine Islands. He also cites the history of Company H, 16th U. S. Infantry, in which on returning from service in the Cagayan Valley he demonstrated the plasmodia in 27 of 47 men doing duty, apparently well, and with no symptoms of malarial infection.

A special pension examiner told me that 75 per cent. of the pensions granted Spanish-

American War veterans were given for disabilities caused by chronic malaria.

Commercial interests have increased travel to and from areas where malaria is endemic, and it can be seen that gamete carriers are very likely to be found in every community, in persons that have lately come from endemic regions, as the following cases illustrate:

A former resident was located in Costa Rica in the employment of a fruit company. He suffered an attack of aestivo autumnal malaria complicated by black water fever. He came home as soon as able to travel, a few days' rest at New Orleans being necessary owing to his weakened condition. He experienced several paroxysms of malaria after his arrival, and his blood contained abundant plasmodia. It was several weeks before he was able to go out on another trip. His wife had preceded him home a couple of months, she having started to miscarry at about the fourth month of pregnancy before arriving. Fever developed after the uterus was empty and her condition became very serious, as the physician in charge attributed the symptoms to puerperal sepsis and did not suspect malaria until a blood examination revealed plasmodia. Under quinine the fever quickly subsided and she went on to recovery.

Here were two persons, their blood swarming with plasmodia, at a time when mosquitoes were very numerous.

The etiology has been proven conclusively since the discovery by Laveran of the specific organisms. The work of Manson and Ross shows conclusively that these organisms are carried and injected into the human circulation by certain forms of mosquitoes.

By the elucidation by McCallum of the significance of the gametes in the circulation of man, and of the later rôle enacted by them in the body of the mosquito, it is definitely established that two requisites exist in every malarial district, viz., anopheles and gamete carriers.

Investigations continued for the last seven years by myself convinces me that we have both the factors present in large numbers for the propagation and spread of the disease in the Wabash Valley.

The number of anopheles and gamete carriers and exposure of individuals to the bites of the infected mosquitoes are the factors which control the extent and severity of epidemics. While the drainage of swamps has decreased the size of breeding places in rural districts, there is a denser population, and fewer anopheles would be required to cause even a greater number of

infections than years ago when swamps were more numerous. The same proposition holds good in towns and cities, where the population has greatly increased, and yet the mosquitoes are very numerous.

During 1908 and 1909 mosquitoes were more of a pest here than at any time within the recollection of the oldest settlers. The statement of the health board at the time that the mosquitoes were of a harmless variety did not agree with the result of my investigations, as I found anopheles in all parts of the city.

The diagnosis should always be made by microscopical examination of the blood, with a well-stained specimen, using oil immersion lens. With our present knowledge of the disease and the specific cause of it, an examination is not complete without a microscopic examination. The administration of 1/30 grain strychnin one or two hours before the specimen is taken seems to be of distinct advantage in chronic cases, by causing a larger number of plasmodia to be found in the peripheral circulation.

Films should be made thin and stained with Wright's or Jenner's stain.

I have been using a stain prepared by Mr. Kenyon of the Polyclinic Hospital in Chicago that gives fine results. Separate solutions of eosin and methyl-azur are used. It requires a little more time, but has the advantage of being stable, and the signet-ring forms are stained very clearly.

Cover glasses should be clean and free from oil or sweat, as it is impossible to make a good film unless the glass is perfectly clean.

Considerable time should be devoted to the examination of a specimen before it is pronounced negative, as the small signet-ring forms can be easily overlooked if too much haste is made in changing fields.

The number of plasmodia in a given specimen does not give an indication of the amount of suffering produced by the infection.

The time a film is made, in relation to a paroxysm, makes a great difference, especially regarding the size of the signet-ring forms. Films made ten or twelve hours after a paroxysm present the larger signet-ring forms.

The clinical manifestations of malaria are so multiform and so variable that to attempt to enumerate them all in a short paper would be out of place; however, a few of the most prominent symptoms may be mentioned.

Pain may be very severe, and variable in location, and is due to neuritis.

Vertigo is a very common symptom, and may be associated with severe headache, blindness and

a bewildered state, or even complete unconsciousness, as is rather frequently observed in the algid type. Drowsiness is usually present and may be extreme.

Gastro-intestinal disturbances are nearly always present, and may be of the utmost severity, as the following case illustrates.

A local physician became suddenly ill January 3, 1913, with severe abdominal pain, nausea and vomiting, followed by persistent hiccough, none of which symptoms yielded to Hoffman's anodyne and the usual antispasmodics which were administered by a brother physician.

January 4 a second physician was called in consultation and on January 6 I saw him in consultation with the two physicians first called. Most of the medical fraternity saw him in the first few days and offered all assistance they could give.

As the symptoms persisted and patient was getting in a very serious condition a surgeon from Ft. Wayne was called in consultation January 8, who suggested rectal feeding by the drop method and the administration of ether to narcosis, and veronal, gr. iii, three times a day. These measures gave no relief. The abdomen was slightly tympanitic and rigid, the bowels had no normal movement, there being passage of bile stools accompanied by griping and discomfort. Bile was present in the vomitus. Temperature subnormal in the mornings and a rise to 101 to 102 F. in the evening.

January 9 I examined his blood and found plasmodia quite numerous and advised the administration of quinin, and 15 grains was given in the evening of the 9th, and also on the 10th.

At the urgent solicitation of one of the consultants, he went to Ft. Wayne on the 11th for examination, where a test meal was given, analysis of which showed absence of free HCl, presence of lactic acid and Oppler-Boas bacilli. A bismuth meal was reported to pass through the stomach in thirty minutes. The diagnosis of inoperable carcinoma of the stomach was made, and patient was sent home. Prognosis was made that he would live but a few days.

January 12 I again examined the blood and found plasmodia in all stages of development. January 13 he was given 5 grains quinin every hour until 65 grains were taken, and 45 grains given daily for a week. There was immediate relief from the hiccough and pain, and improvement in every respect. Iron, arsenic and digestive ferments were given in connection with the quinin, and his condition was so improved that

he was able to resume his practice May 1, 1913. He has gained in weight from 120 pounds to 185 pounds and is enjoying good health, proving conclusively that his symptoms were due to malaria.

One patient, a young matron, had a remittent fever for a few weeks, followed by a general neuritis, the seat of pain localizing over articulations of inferior maxilla for a few weeks, then the pain shifted to the left eye. She consulted an oculist, who diagnosed her trouble as a specific iritis and gave her a grave prognosis. She then consulted an oculist in a neighboring city, who diagnosed her case as a malarial neuritis, and sent her back to me for a continuation of anti-malarial treatment, telling her the pain would leave the eye as suddenly as it had occurred there. This prognosis proved correct, as the pain left very suddenly and there has been no recurrence, the patient has gained in weight and enjoys good health. Antimalarial treatment was given for over a year in this case.

In the fall of 1912 a young lady of 19 years applied for relief from pain in the left hip that had caused her suffering for over two years. She had consulted several physicians and surgeons, and on two different occasions she had been confined to bed for a period of eleven weeks with an extension of the left leg, on the presumption she was suffering from a tubercular infection of the hip joint. This gave no relief, the pain was in the sciatic nerve and extended down the limb. There was numbness of all the extremities at times. There was a slight jaundice, coated broad tongue, vertigo and general malaise. Temperature had at times been subnormal and at times a slight fever. Blood examination revealed plasmodia, and antimalarial treatment gave permanent relief.

In the treatment, quinin is given first place and is specific, if given in sufficient dosage and in a manner in which it is absorbed. Quinin tablets have been in my hands quite inert, as they are so insoluble that little therapeutic result is obtained. For several years I have been using a gelatin-coated pill made from a mass, made by adding to the ounce of quinin sulphate 1 dram capsicum, 1 dram hydrochloric acid and enough glycerin to make a pill mass. This mass can be made and rolled in rolls that can be cut and put in capsules. For several years I have had them made in two sizes, one containing 5 grains and one 2 grains quinin to each pill. The dosage should be regulated by the age of the patient and urgency of the case. In cases seen in office practice I usually give 10 to 20 grains after supper

each evening, for a variable length of time, then the same dose once or twice a week, as seems best, for a period of a few months or a year, until the patient is free from the disease.

Hinckle's formula with the addition of calomel $\frac{1}{4}$ gr. "and the addition of phenolphthalein where it is needed" is an effective and not unpleasant cathartic or laxative.

Elix, alkaline digestive and Elix. Rhei, Pot. Carb., equal parts, a teaspoonful in half cup hot water before meals, greatly relieves gastrointestinal distress.

Pains due to neuritis usually yield readily to aspirin and Cook's neuralgic pills.

Cupping gives in the region of the inflamed nerve often giving immediate relief from pain.

Drinking hot water in large amounts gives great relief from the bilious vomiting so often present.

Iron, arsenic and strychnin to combat weakness and anemia should be given.

Where bilious vomiting is obstinate and profuse, a hyperdomic of morphin and atropin, followed by a large dose, "about 30 grains of quinin, as the patient comes under influence of narcotic," will usually give prompt relief.

No hard and fast rules can be laid down in the conduct or treatment, but it must be varied by the symptoms and idiosyncrasies of the patient.

METASTATIC INFECTION *

F. S. CUTHBERT, M.D.
KINGMAN, IND.

Patient, A. W., male, age 19 years. Has had the usual diseases of childhood. Also has had two or three attacks of follicular tonsillitis, between the ages of 12 and 15 years. Following the last attack of tonsillitis the right tonsil remained hypertrophied and was removed in part.

On April 22, 1913, the patient took sick in the schoolroom and left the room, going to the basement. After remaining there for a few minutes he felt worse and started home. He awoke from a faint, finding himself on the basement steps. He slowly made his way home, taking his bed, which he was not able to leave for several weeks.

I was called to see him immediately and found temperature 102, pulse 100, respiration 30. Patient complained of pain in right hip-joint,

which was very severe. There was some edema, a very faint eruptive ring on the skin corresponding to the neck of the femur. The hip-joint was held in the flexed position continually and could not be extended the least degree without causing intense suffering. After three or four days a rash developed on the anterior aspect of both ankles, which gradually faded away in about three weeks.

Throat examination revealed the tonsils normal, but a broad, flat ulcerated area on the posterior wall of the pharynx.

My first diagnosis was acute rheumatic fever, to which I held for six days. The patient gradually grew worse, complained of pain on the inner side of knee of that leg and of pain in the hip, which was expressed by the patient to be of a crushing, bursting nature. There had been no typical rheumatic sweats. There was no reaction to the salicylates in large doses, alkalies were given to the point of saturation, and still the patient complained very bitterly of the pain in the hip, regardless of opiates.

Sixth day, temperature 104, pulse 120, respiration 30. Urinalysis normal, except urine dark in color. Drs. Caplinger and Caplinger of Wallace, Ind., were called to see the case with myself, and a diagnosis of infection of the neck of the femur, the fasciae of the joint and probably the subperiosteal structures was made. A drainage of the neck of the femur was advised, with a removal of a button of the bone. This was refused by the family, which was very much opposed to surgery.

On the seventh day I called an internist of Indianapolis to see the boy. He made a diagnosis of acute rheumatic fever, and advised the salicylate of soda per rectum, 40 gr., followed in twelve hours with 60 gr. if there was no remission of the symptoms. The symptoms were not alleviated in the least, and the two doses were followed in another twelve hours with 40 gr. under the advice of the internist. The patient seemed to get the full effect of the salicylates, but with no abatement of the symptoms.

A swab from the patch in the throat revealed a pure culture of the staphylococci. Blood-count revealed 15,000 white, and 86.5 per cent of these were polymorphonuclear leukocytes. This count as we all know reveals an infectious process somewhere in the body.

On the following days, from the seventh to the fourteenth, the temperature, pulse and respiration were about the same. Patient very delirious at times, sleep restless, picking at bedclothing

* Read before the Parke-Vermillion County Medical Society.

and reaching for imaginary things, muttering all the time, pupils dilated very large, hands in a constant tremor. Cold sponging, applied by a nurse, failed to reduce the temperature in the least. There was no retraction of the head or tenderness along the spine. The heart became dilated, the apex beat was displaced slightly below and $1\frac{1}{2}$ inches to the left of the nipple line. The ice-cap was applied to the head and at regular intervals to the precordium. The delirium and temperature were reduced slightly. All this time the patient complained bitterly of the pain in the right hip and held the limb in the flexed position.

About the fourteenth day the patient began to complain of pain in the region of the left shoulder, not in the joint but on the top of the shoulder, and an induration began to form, extending from the point of shoulder to the base of the neck, and seemed to be an inflammation of the muscles and sheaths. A flax-seed poultice was applied, and in three days fluctuation was observed. The part was incised with a moderate amount of pus evacuated, which showed a pure culture of staphylococci. You will note that this was the same as the finding in the throat.

In two days after the shoulder was lanced the swelling and tenderness were all gone and the joint had regained its usefulness. The delirium cleared up largely, the temperature dropped to 101, pulse 96 to 100 and remained that way for weeks to follow. The ulcer on the posterior wall of the pharynx persisted in spite of local applications of iodine and glycerin, alkaline sprays, and occasionally an application of 10 per cent. nitrate of silver. The ulcer gradually extended over the side of the pharynx and onto the soft palate, covering the side of the uvula. About the end of the fourth week the ulcer gradually faded away. At no time did the patient complain of the throat.

About the time that the shoulder cleared up an induration appeared on the outer aspect of the hip. Poultices were applied, but no fluctuation appeared, and after a time the poultices were discontinued. The acute pain gradually subsided in the hip-joint, but if an extension of the leg was attempted it was bitterly objected to by the patient and the family as well.

The acute inflammation gradually faded into a sub-acute process, the temperature ranging from $99\frac{1}{2}$ to 100.

I did not have the pleasure of following up this exceedingly interesting and unusual case. There has been quite a diversity of opinion among the physicians (eight in all) that have treated this

case. As is usual in a case like this, the patient drifted into the hands of an osteopath, but with nothing startling achieved. At this time, August, 1914, the patient is able to get around by the aid of a crutch and cane, but with an ankylosis of the hip.

In our differential diagnosis there are many forms of arthritis, either primary or secondary to some other disease, followed by joint symptoms, which comprise a long list, including gout, rheumatoid arthritis, osteo-arthritis, acute articular rheumatism, influenza, scarlet fever, typhoid, septicemia, tuberculosis, gonorrhea, syphilis, osteomyelitis, infections of the gall-bladder, hemophilia, scurvy, lead poisoning, syringomyelia, tabes dorsalis, etc., but in the case before us you no doubt think of its likeness to acute rheumatic fever.

In acute rheumatic fever the sweats are profuse, at first acid, and are very characteristic. Sudamina and a red miliary eruption are of frequent occurrence. Anemia develops very rapidly.

In our case there was no sweating except when the salicylates were given heavy per rectum. In acute rheumatic fever the fever is very irregular, rising and falling as each joint is invaded. Free sweating lowers the temperature, and in protracted cases short periods of improvement alternate with relapses. In our boy's illness the fever ran a regular course without any exacerbations, and he complained of the hip from the beginning and throughout his illness.

We are forced to rule out acute rheumatic fever and accept Dr. John B. Murphy's diagnosis of metastatic infection, the primary lesion being in the pharynx, a broad, flat, ulcerated area, usually on the posterior wall of the pharynx, the causative factor being the staphylococci, with metastasis in any part of the body, usually the joint structures.

In John B. Murphy's *General Surgery* (Year-Book, 1913) he says, "A little over eight years ago we called attention to the fact that acute arthritides preceded by a chill were metastatic, and the primary infection was in the pharynx, not confined to the tonsils but spread over a considerable area of mucous surface."

He also says, "We have now seen hundreds of cases of metastatic arthritides resulting in ankylosis, from primary infection of the throat. Prompt action on the part of the surgeon must be resorted to in order to avoid these baneful results."

Dr. Wm. J. Taylor of Philadelphia, in the *Annals of Surgery* for June, 1912, describes some

very interesting cases which will amplify our subject. "The first was that of a gentleman of 46, who had a violent tonsillitis, evidently streptococcic, and distinctly not diphtheritic in character, which was followed by arthritis of both elbows. This was presumed to be rheumatic and resulted ultimately in complete ankylosis of both elbows. After various methods of treatment had been tried by his physicians in a neighboring city, including repeated etherizations and attempts to secure motion in the joints (fourteen attempts in as many weeks), he was finally referred to me for surgical treatment. An examination by Roentgen ray showed complete and firm ankylosis of each elbow and almost total destruction of the joints. The elbows were fixed at such an angle that he was helpless. He could not dress nor feed himself, and what annoyed him most he could not even use his handkerchief. I resected his left elbow, removing the disorganized joint, and being careful to take away an ample amount from the humerus as well as the ulna. The result from a practical standpoint has been most satisfactory in that he has perfect freedom of motion and a thoroughly serviceable arm. I declined to dissect both elbows at the same time, preferring to try what could be accomplished with the left one, leaving to a later occasion operation on the right arm. He has been so much improved in every way and can carry on his business as a draughtsman, that nothing has been done further."

"The second case was that of a small child 5 years of age, who had an acute tonsillitis, presumably streptococcic, for there was no diphtheria, followed shortly by an epiphysitis of the left femur, and for months she was ill. Finally recovery took place, but with a permanently damaged hip-joint."

"The third case was that of a lady of 29, the mother of three children, who was apparently in perfect health with the exception of a uvula which was somewhat long and annoying. The end of the uvula was clipped off in the office of a throat specialist, and by the end of the next day she had an acute tonsillitis, followed by very high fever and evidence of profound constitutional infection. At the end of forty-eight hours she complained of abdominal pain (she was menstruating at the time) over both ovaries, and this progressed until her symptoms were so urgent that her abdomen was opened by another surgeon. An abscess of the right ovary and tube was discovered, with general septic peritonitis. Death followed in less than a week from the onset of her symptoms and was clearly due to a

streptococcic infection with the primary seat of invasion in the tonsil and uvula."

The fourth case was that of a lady of 40, who had an acute tonsillitis directly traceable to an infected telephone through which she had been talking. Her butler had the tonsillitis and used the telephone, and this lady developed tonsillitis shortly after speaking through the same telephone. She was a frail and delicate woman and before her throat was entirely well she went to the opera, from which she returned with a chill and a very violent headache, and marked increase in her throat discomfort. A hypodermic injection of morphine was given in her left leg by a physician, who used every possible precaution against possible contamination by the needle. In a few days she was in a desperate condition. The leg was opened from the knee to the ankle and gave vent to very much pus and broken-down fatty tissue. A smear from this pus showed pure streptococci. She had a very profound sepsis. Her blood was not red, but of a chocolate color, and for a long time it looked like she could not live. She recovered only after weeks of illness."

These four cases of Dr. Taylor's will amply illustrate the extreme danger which may result from a very common affection, and which I do not think has been fully appreciated by the general practitioner of medicine.

Enlargement of the cervical lymph-nodes following tonsillar infection is of course very common, and probably we all have seen a few instances of infection of the mastoid cells and cerebral complications. We all are aware of the relation of angina and rheumatism, and know that a large number of staphylococci and streptococci inhabit the mouth and throat. As the tonsil belongs to the lymphadenoid tissue and is covered by involuted mucous membrane and is a collection of recesses and glands, it readily can be seen how generalized infection can follow an acute tonsillitis. The question of absorption through the tonsils of various materials has been studied carefully, and their power of filtering bacteria is thought to be somewhat similar to the lymph-nodes, and to this extent they are of great benefit. But sometimes the sentinels are overpowered by the enemy and the tonsils become so diseased that they are no longer of benefit to the human body. Then they should be removed. The tonsils have a function and a very important one as long as they remain healthy and can functionate properly, but failing in this they are like the diseased appendix, better removed than to linger in the body.

My own belief is that Nature puts the faucial tonsil, the pharyngeal tonsil and the lingual ton-

sil at the opening of the gastro-intestinal canal as a protection against general infection. When infection gets into the mouth the tonsil acts as a filter plant, in a manner similar to the action of the inguinal and axillary glands, which catch the micro-organisms which come from the lower and upper extremities respectively. Therefore, it is a very unwise thing to take out radically either moderately or slightly diseased tonsils of a child until we have more authoritative knowledge of the function of these organs.

Some of the cases that I have quoted show apparently that the first place the infection stopped was at the tonsil. Of course, if the infection gets beyond the tonsil, either because the tonsils have been removed or because their filter function is not in good working order, general infection occurs, and may show arthritis, abdominal or other symptoms.

It has been proposed that in acute articular rheumatism the tonsils be immediately and completely removed, and in certain cases where this has been done it has been followed by a prompt subsidence of the joint symptoms and a rapid convalescence. This is such a radical procedure that it takes our breath away, and only in view of profound constitutional complications can it be considered justifiable.

Doctor, don't forget your throat examinations.

HEMOPTYSIS AND ITS TREATMENT*

JAMES RUSSELL STEWART, A.B., M.D.
COLORADO SPRINGS, COLO.

From the time of Hippocrates a certain relationship between hemoptysis and pulmonary tuberculosis has been known to exist, although for a long time the true relationship was not understood. Hippocrates thought, and for perhaps several centuries, it was believed that the tuberculosis occurred as a result of the hemoptysis, but we now know that the conditions are reversed and that the tuberculous process produces the hemoptysis.

Hemorrhage is not an infrequent accompaniment of pulmonary tuberculosis, different authorities placing the frequency at from 20 to 80 per cent. Age is an important factor inasmuch as previous to puberty hemoptysis very rarely occurs. Often a hemorrhage occurs at the beginning of the disease. Its origin is explained by Cornet as follows: "The living bacillus, derived from a dis-

organized tubercle, finds its way into a perivascular lymph-channel, deposits itself on the wall of a vessel, and by proliferation invades this wall. Altered in this manner, the vessel loses its power of resistance against the blood-pressure so that even under normal conditions, but especially if the blood-pressure becomes increased, the diseased vessel bursts and the blood is poured out into the lung. This process is, however, exceptional; as a rule the proteins have already distributed themselves in the vicinity of the tubercle and have produced an inflammatory reaction on the part of the capillaries and obliteration of the lumen. Hemorrhage of the kind just described, therefore, occurs only while the proteins are still scarce; that is to say, at the beginning of the process."

When there is a cavity there is often a cylindrical aneurysm present which courses along its wall or which traverses it. Here, too, rupture may occur under increased blood-pressure, partly because the vessel wall may be diseased and partly because the vessel lacks the support of the surrounding connecting tissue. The hemorrhage in this case is generally much more serious; in fact there is danger of the patient passing out, and, though it is on the whole not frequent, yet does now and then occur. Hemorrhage may also be due to overcongestion of the lung. The amount of blood expectorated varies from a streak to a pint or more. There may be simply a spot in the sputum; at other times it may be rose-colored; or, if the blood has been extravasated for some time, dark coagula are formed.

At times hemoptysis occurs without any warning. The patient wakes toward morning, has a slight irritation in his throat, coughs and has a sweet taste in his mouth, and to his terror sees that it is blood. There may be no more blood or he may expectorate two or three times and for the time the attack is over. However, in many instances, the sputum retains a bloody discoloration which in the next few days becomes darker and finally disappears. In some cases of large hemorrhage the blood flows without cessation and even gushes from the mouth and nose. In other cases the hemorrhage may be large without much blood being expectorated. Here it pours into the lung and the patient is literally drowned in his own blood.

Occasionally a large hemorrhage may be preceded by certain symptoms, such as a feeling of oppression in the chest, irritation of the throat, a sore spot in the lung, or streaking of the sputum.

In some cases they result after severe exertion, such as running upstairs, or after a nervous

* Read before the El Paso County Medical Society, Colorado, March 11, 1914.

shock. Pronounced mental excitement or fits of crying may likewise give occasion to hemorrhage; in fact anything which raises blood-pressure may cause it.

Atmospheric conditions have an undeniable effect in producing hemorrhage. No doubt everyone who has seen a number of cases of tuberculosis has been struck with the occurrence of several cases of hemorrhage within a day or two, and ascribable only to weather conditions. The premenstrual period is said to have a distinct effect in producing them, and vicarious menstruation has often been reported.

While there are various conditions which can produce a flow of blood from the mouth, simulating a pulmonary hemorrhage, such as heart disease, hemophilia, aneurysm, and others, the great majority of all hemorrhages are dependent on pulmonary tuberculosis and one does not often go wrong in considering hemorrhage to be of a tuberculous nature. The statistics of Sticker as to hemorrhage in the ranks of the German army are interesting. He found that of 480 cases of hemorrhage, either without known cause or following "colds," 221 were tuberculous and 196 probably so (86.6 per cent.). And of 379 cases of hemorrhage resulting from overexertion, singing, trauma and the like, 282, or 74.4 per cent., were tuberculous.

Pulmonary hemorrhages are also found in hysteria, but, in this case, there is usually a reddish discoloration of the sputum lasting over a long period instead of severe bleeding. Blood coming from the mouth, gums, throat or stomach may simulate a hemoptysis but can usually be differentiated from it. Heart disease and pulmonary tuberculosis are the most common causes of pulmonary hemorrhage. Heart disease can usually be excluded by a thorough examination, and, if this cause is eliminated, the evidence must be very strong to support any other diagnosis than that of tuberculosis.

The color of the blood in early cases is bright red, being venous. In advanced cases it is darker being due to arterial blood. If the hemoptysis lasts for some days the later blood is clotted and dark but by degrees the blood-clots lessen and the sputum regains its normal color.

The temperature rises moderately within a few hours after a hemorrhage except in very slight cases. After a very large one the temperature may fall but within twelve to twenty-four hours there will always be a rise, which, if no complications develop, gradually disappears. A hemorrhage may be single and never recur. When these cases come to autopsy much later they show

old healed tuberculous foci. Where larger cavities do not exist, frequently recurring hemorrhages speak for a rapidly disseminating process in the lungs. In early cases the immediate results are generally negative. In more advanced cases the patient may occasionally feel better after the hemorrhage, but in very advanced cases, even if death does not immediately ensue, the effects are generally disastrous.

Hemorrhage is probably more alarming to the patient and his friends than any other symptom and for this reason the presence of the physician is more necessary than at any other time. The sight of the blood, the suddenness of the onset, and the feeling of helplessness are the causes of the great terror and demoralization on the part of the patient. A great deal depends on getting both the body and the mind at rest and this is almost impossible before the arrival of the physician for the friends are often more frightened than the patient. The patient realizes that he is completely at the mercy of the hemorrhage but the arrival and reassuring words of the physician quiet this anxiety, and this alone will occasionally cause a hemorrhage to stop in a remarkably short time.

The first thing to be done is to get the patient to bed. The cases of blood-streaked sputum perhaps require no other treatment. In other cases the patient should lie flat on his back with the body elevated to let gravity act as little as possible and also to let the patient expectorate the blood easily. All that is necessary if the patient is propped up is for him to turn his head to one side to expectorate, but if he is lying flat in bed and has to raise himself on his elbow every time, he gets little rest. He should not be allowed to raise his head, talk, or use his arms. An attendant, if one can be had, should catch the blood in a basin or, if the hemorrhage is less active, should wipe it from the patient's lips.

Reassurance is most important for a frightened or nervous patient since fright raises the blood-pressure and thus promotes the flow of blood. A physician can often quiet his patient by stating that in the majority of cases a few days' rest will easily make good the loss of blood and in the case of women, by reminding them that they lose far more blood at the time of menstruation without suffering any harm. For lowering the blood-pressure, steadying the heart's action, quieting the patient, and allaying the cough, nothing is more efficacious than a hypodermic injection of morphia— $\frac{1}{8}$ to $\frac{1}{4}$ grain. It is claimed by some that the morphia may cause the blood to accumulate and strangle the patient, but I believe, and I

think the majority of observers are agreed, that if the blood is left to flow freely, there will be more danger of the patient dying from loss of blood than from the risk of strangulation with use of the drug. The morphia may be repeated to keep the patient quiet and control his cough.

The sucking of ice is a comfort to the patient. It probably does not have much influence over the bleeding, but it is a convenient way of allaying the thirst without adding much fluid to the blood.

Many drugs have been advocated to stop a hemorrhage. However, it tends to stop as soon as the decreased quantity of blood left in the vessels has lowered the blood-pressure and shortened the coagulation time, so that the good results cannot always be attributed to the use of drugs. Morphia is our most important and reliable drug.

Ergot and adrenalin have been advocated because they control hemorrhage in other parts of the body. They raise the blood-pressure in both the systemic and pulmonary circulation and in this way promote the loss of blood, but they also cause contraction of the muscularis of the blood-vessels. Pituitrin, which has been advocated, acts in practically the same way. The nitrites have also been used because of the quality of lowering the blood-pressure. If the pulse is hard and the blood-pressure is high, one may use a pearl of amyl nitrite in a handkerchief and follow this by nitroglycerin or sodium nitrite because the effects of the latter two are of much longer duration. If the coagulation time is prolonged calcium lactate or gelatin may be used. If the source of the hemorrhage is accurately known the ice-bag may be applied over it. But it is difficult to determine the source and examination thorough enough to locate it is dangerous and should not be made. An ice-bag over the heart quiets the heart's action and so reduces the blood-pressure somewhat.

Horse-serum has been used and occasionally seems to be good.

The bowels should be kept freely open by the use of salines. Violent purging is to be avoided because of the exertion and frequent strain. At the Massachusetts State Sanitarium purging is produced by magnesium sulphate, $\frac{1}{2}$ ounce one-half to one hour after appearance of hemoptysis. They claim very good results in spite of the fact that the occasional vomiting and retching would appear to be harmful.

When the hemorrhage threatens the life of the patient, the application of ligatures to the extremities is a useful measure. They should not

be tight enough to restrict the arterial flow but enough to shut off the venous. These should be released successively to let the blood into the general circulation. If loss of blood is excessive hypodermoclysis may be necessary.

The value of pneumothorax must not be overlooked. When other means of treatment have failed, compression of the lung will often stop the hemorrhage permanently. It should be unnecessary to add that the section of the lung from which the bleeding arises must previously be accurately determined and must be strictly unilateral.

After severe hemorrhage nothing should be given by mouth except ice or occasional sips of water. The diet should be restricted, many using a light, dry diet. Not much food should be given at one time because overloading the gastrointestinal tract throws an extra load on the circulation, but frequent feeding is desirable.

Of course the after-treatment depends on the severity of the case. If the hemorrhage is very small the patient should be left in bed two or three days, then if the sputum is clear and the temperature is normal, he may be allowed up.

After a large hemorrhage he should be kept in bed several days and a pneumonia should be watched for. If the fever persists it should make one suspect a renewed activity of the disease. Such patients should lead a quiet life for some time and avoid any excesses, for among the hemorrhagic, prophylaxis is most important.

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119 E. Willamette Street.

THE European war has played havoc with the prices on many drugs and chemicals, and especially those that are manufactured abroad. As has been remarked by *The Journal of the A. M. A.*, the lesson taught is that we should so modify our patent laws as to make it incumbent on foreign manufacturers to provide for the manufacture of their products in this country in such emergencies as at present confront us. We have the facilities as well as ability to manufacture anything that is manufactured abroad, and there is absolutely no reason why we should not be permitted to supply the local markets in a time like this, and particularly if provision is made for protecting the owner of the trade-mark or patent.



JOHN P. SALB
President Indiana State Medical Association, 1913-1914



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SECOND VICE PRESIDENT
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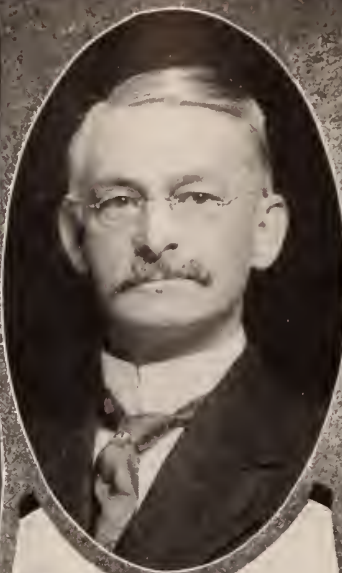
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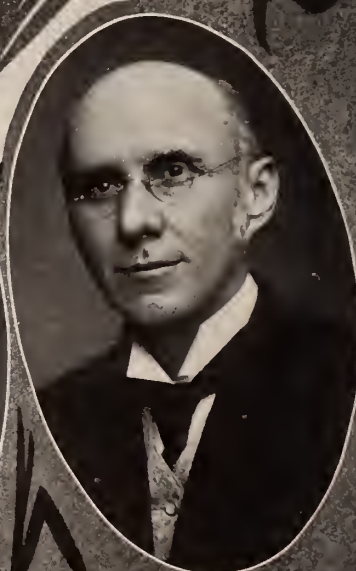
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Fort Wayne
Chairman Medical Section

THE LAFAYETTE SESSION

THE LAFAYETTE SESSION

The sixty-fifth annual session of the Indiana State Medical Association will be held in LaFayette, Wednesday, Thursday and Friday, September 23, 24 and 25. According to a vote of the House of Delegates, the Association is supposed to confine its meetings to two days, but in keeping with custom the local medical profession of LaFayette has provided an entertainment for Wednesday evening, September 23, and the Constitution and By-Laws calls for a meeting of the House of Delegates at the same time. The scientific meetings, however, will occur on the two principal days of the session, or Thursday and Friday.

This is not the first time that the Association has met at LaFayette and the members will remember a very profitable and entertaining session held there in 1898. Since then both LaFayette and the Association have grown in size and importance. From a membership of about 1,500 when we last met in LaFayette, the Association has now grown to a membership of nearly 3,000. The local medical society of LaFayette has also grown in size, and it is recognized as one of the progressive medical organizations of the state—a reputation that has been well sustained for many years.

LaFayette is centrally located and easy of access by numerous steam roads and electric lines. It is on the Sandusky & Rankin branch of the Lake Erie & Western; the Cincinnati and Chicago branch of the Big Four; the Chicago and Louisville branch of the Monon; the main line of the Wabash; the Northwestern Division of the Terre Haute, Indianapolis and Eastern Traction Company, and the LaFayette and Indianapolis branch of the Fort Wayne & Northern Indiana Traction Company. The train service by both steam and electric roads is therefore very convenient to members from all sections of the state.

The Committee on Arrangements has submitted a brief history of LaFayette, prepared by one of its distinguished citizens, which is published herewith.

THE CITY OF LAFAYETTE

BY HON. ALVA O. RESER

William Digby laid out the plat of the city of LaFayette on May 25, 1825. The portrait of Mr. Digby, as given herewith, is from the origi-

nal oil painting by the celebrated Indiana artist, George Winter, and represents the founder of the city of LaFayette sitting on a log on the bank of the Wabash. At the time Digby platted the town site which he named LaFayette, General Marie Jean Paul Roch Yoes Gilbert Motier De LaFayette, who had aided the Colonists in their war for independence, was visiting the United States. General LaFayette was then 68 years old. He visited St. Louis on April 29, 1825, with his son George Washington LaFayette: Louisville, May 9, 1825; Cincinnati, May 19 and 20, 1825, and on May 25, 1825, the day the site of LaFayette was platted by Mr. Digby, General LaFayette was at Uniontown, Pa. It



GEORGE F. KEIPER
Chairman of Committee on Arrangements

was because of this fact and the interest of the country in General LaFayette at that time, that induced William Digby to name his town site LaFayette. At that time LaFayette was at the head of navigation on the Wabash, and this fact was an important factor in its rapid progress.

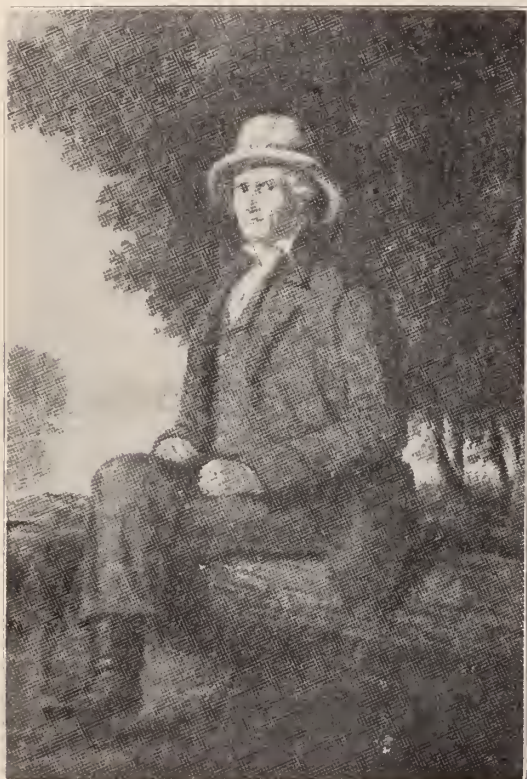
According to the United States Census of 1910, LaFayette had then a population of 20,081, and West LaFayette 3,867, the two being separate municipalities, with the Wabash River between them.

Some of our visitors may be interested in public school architecture, and we call the attention

of such to our \$300,000 high school building. Those who are interested in clubs should visit the LaFayette Club, the Lincoln Club, the Elks' Club and the Country Club. No city of its size in Indiana is so well equipped with social clubs as is LaFayette. Those who are interested in art and in Indian lore should call on Mrs. C. Gordon Ball, whose father, George Winter, was an artist of national fame, and see the splendid portraits that he painted of the Miami Indians. Mr. Winter painted the only portrait ever made of Frances Slocum, "The Lost Sister of Wyoming," and in all human history there is not recorded so fine an example of the effect of

the Washington School may be seen the Jacob Madden collection of Indian relics, probably the finest collection in the state. Those interested in live stock should visit the Crouch Stock Farm and see the finest horses in the world.

Some of our visitors may be interested in history, and to such we would call their attention to the fact that LaFayette is situated on the east bank of the Wabash River, and that the first real history of the state was made along this river. About the year 1719 there was established four miles south of LaFayette a French village, called Ouiatenon, and some of our best historians and bibliographers say that this was the first white settlement in Indiana. Jacob P. Dunn, in his History of Indiana, says: "Ouiatenon was the first military post established on the Wabash and probably the first within the bounds of Indiana." Hon. E. E. Moore, in his book



WILLIAM DIGBY,
Founder of La Fayette, Ind.

environment as the life-story of Frances Slocum. General John Tipton died at Logansport in 1839. He had been United States senator, and no man made a deeper impression on the early history of Indiana than did he. When General Tipton died there was no portrait of him. George Winter went to Logansport and painted a portrait of General Tipton, after his death, and made it as lifelike as though taken in life, as Mr. Winter knew the General well. This portrait hangs in the Masonic Hall at Logansport. The paintings in the possession of Mrs. C. G. Ball should be seen by every visitor to LaFayette. At



LINCOLN CLUB

entitled, "A Century of Indiana," says: "After a careful sifting of all available evidence, competent authorities have adopted the year 1720 as the most probable date of the settlement of Ouiatenon, and accord it the honor of being the oldest outpost of civilization in the state." The LaFayette Chapter D. A. R. has erected a marker on the site of Ouiatenon.

The medical profession of LaFayette has always maintained high rank, not only from the professional standpoint of the doctor, but in all that goes to make a high-class citizenship and leadership in progressive thought along all lines. We will not mention any individuals of the present day, but it may not be amiss to state that the only "underground railway" station in Tippecanoe County, in ante-bellum days, through which the negro traveled from the whipping-post, the auction block and slavery in the South.

to Canada and freedom in the North, was the home of Dr. Elizur Demming, high-class physician, patriot and orator.

St. Elizabeth's Hospital, under the charge of the Sisters of St. Francis, is one of the most famous in the Central West. The hospital covers the area of one city block, and has 110 private rooms, five suites of operating-rooms, fifteen wards and 220 beds.

The other hospitals of the city are: the Detention City Hospital (for small-pox only), 35 beds; the LaFayette Home Hospital, a quasi-public institution, 50 beds, together with a maternity department with 12 beds; Old People's Home (private), 10 beds; St. Anthony's Home (for old people), 60 beds; County Children's Home

the women 69. In the operation of this Home, Indiana recognizes that in war the women suffer as much as do the men, and that the wife who stayed at home and kept the family together should not be forgotten.

The annual death-rate of LaFayette is only twelve to the thousand persons. The drinking water comes from driven wells, far below the surface. The streets and alleys are kept clean, and rubbish and decaying material are disposed of in a crematory. LaFayette has an artesian well. On April 22, 1857, the county commenced digging a well for public use. It was completed Feb. 18, 1858, at a depth of 230 feet. The water flowed from the top and soon became famous for its health-giving properties. A complete



LAHR HOUSE—GENERAL HEADQUARTERS

(public), 75 beds; Wabash Valley Sanitarium (private), 30 beds; State Soldiers' Home Hospital, 160 beds.

Purdue University, with its 2,200 students, is located in West LaFayette. This institution was organized under an Act of Congress, passed July 2, 1862, called the Morrill Act, and which was designated "As an Act donating public lands to the several states and territories, which may provide colleges for the benefit of agriculture and the mechanic arts." The institution was named for John Purdue, who donated \$150,000 to it.

The Indiana State Soldier's Home is located 31½ miles north of the city of LaFayette. There are at present in the home 485 men and 890 women. The average age of the men is 72; of

analysis of the water was made by Charles M. Wetherill, Ph.D., M.D., in 1859. He discovered at that time that this water on first being exposed to the surface was, in its temperature, 55 degrees. One pint contains ½ cubic inch of sulphureted hydrogen, 1¼ cubic inches of carbonic acid and ⅔ cubic inch of nitrogen gas; also contains 1½ grains of magnesium, half a grain of chlorid of calcium with slight traces of magnesia, peroxid of iron and silica.

LaFayette is the county seat of Tippecanoe County. The word Tippecanoe in the Indian tongue, signifies Buffalo fish. Seven miles north of the city of LaFayette, reached by trolley car, is the Tippecanoe Battlefield, where, in the early morning of Nov. 7, 1811, was fought the Battle of Tippecanoe. This battle was one of national

importance. It was really the first shot in the war of 1812, and was the last purely Indian battle fought east of the Mississippi River. It is the most important battlefield in the state of Indiana. The Nation and the State, jointly, have erected a monument on the battlefield at a cost of \$25,000. In 1840, when General William Henry Harrison was a candidate for president, there was held at the battlefield probably the greatest political rally ever held in the state of Indiana. Even in that early day 40,000 people were pres-

mittee appointed to look after accommodations for guests reports that there will be ample room in hotels, boarding houses and private residences for all who come. All visitors are requested to apply to the Committee on Accommodations at the time of registration, for assistance in securing lodging if arrangements have not been made prior to going to LaFayette.

The Bureau of Registration will be in the Y. M. C. A. Building where all are expected to register on arrival.



TIPPECANOE COUNTY COURT HOUSE

ent. Steamboats came up from Vincennes. A visit to this historic spot will be well worth while.

LaFayette is highly honored in having been chosen as the place of meeting of the medical profession of Indiana, for, as was said by Cicero, "He who alleviates the sufferings and pangs of humanity comes nearer to God than the angels."

ARRANGEMENTS

The Committee on Arrangements announces that all due preparations have been made for a very successful session at LaFayette. The com-

The House of Delegates will hold its first meeting in the Auditorium of the Lincoln Club on Wednesday evening, September 23, at 7:00 o'clock. Its second meeting will be held in the lecture-room of the Second Presbyterian Church on Friday morning, September 25, at 8:00 o'clock.

The Council will hold its first meeting in the parlors of the Hotel Lahr, Wednesday, at 3:00 p. m., and its second meeting in the lecture-room of the Second Presbyterian Church, at 11:00 a. m. on Friday.

All general meetings will be held in the Auditorium of the Second Presbyterian Church. All of the sections will hold their meetings on the second floor of the Y. M. C. A. Building.

EXHIBITS

The commercial exhibit for the LaFayette session will be arranged on the first floor of the Y. M. C. A. Building. Here also will be exhibited such pathological specimens as are offered by the Committee on Pathology and various members of the Association. According to a rule passed by the House of Delegates, the commercial exhibits must be of approved character.

Society at the Lincoln Club. This will begin at 9:00 p. m. Light refreshments, soft drinks and cigars will be served, and every member of the Tippecanoe County Medical Society will make himself a committee of one to see that visitors get acquainted and have a good time. On Thursday evening the Tippecanoe County Medical Society will tender a complimentary reception and ball at the Lincoln Club for the visiting doctors and their ladies.

Ample provision has been made for the entertainment of the ladies. On Thursday afternoon the ladies will be entertained at the LaFayette Country Club, and automobiles will be provided



Y. M. C. A. BUILDING

and all exhibited pharmaceutical preparations must have been passed on favorably by the Council on Pharmacy and Chemistry of the American Medical Association. Inasmuch as the exhibits are to be of a high character, the members of the Association are justified in giving them favorable consideration.

ENTERTAINMENTS

The local Committee on Arrangements has endeavored to arrange the entertainments in such a way that they will in no wise conflict with or hinder the scientific work. Following the meeting of the House of Delegates on Wednesday evening there will be an informal smoker given by the Tippecanoe County Medical

to convey the ladies to and from the Club. On Friday morning the ladies will be given a complimentary automobile drive over the city and to prominent scenic points.

REGISTRATION

The registration desk will be open Wednesday evening and all day Thursday and Friday. Please bring your membership cards with you, as it will save you time in registering. Members without their cards may register after their standing has been verified by consulting the records. Members are reminded that they are required to designate under which section they wish to be enrolled, i. e., Surgical, Medical or Eye, Ear, Nose and Throat. You are requested to wear the official badge,

which is supplied when you register, while attending or participating in the section meetings.

OFFICIAL CALL TO THE HOUSE OF DELEGATES

The next annual session of the Indiana State Medical Association will be held at LaFayette on Wednesday, Thursday and Friday, September 23, 24 and 25, 1914. On a basis of ratio established by the by-laws, there will be a possible 111 delegates, distributed by counties as follows: Marion County, 6; Allen, Vanderburg, Vigo and Lake, each 2; the other eighty-two counties each 1; the thirteen councilors and the president and secretary of the Association. County medical society secretaries must see to it that credentials for the delegates are in the hands of Dr. Allen Pierson, Spencer, Ind., on or before the first



SCENE IN COLUMBIA PARK

called meeting. No delegate will be seated unless wearing the official badge. The House of Delegates will convene promptly at 7:00 p. m., Wednesday, September 23, at the Lincoln Club, and again at 8:00 a. m. on Friday, September 25, at the Second Presbyterian Church.

The order of business will be as follows:

1. Call to order by the president.
2. Roll call and seating of qualified delegates.
3. Reading of minutes of previous meeting.
4. Reports of officers:
 - (a) Secretary.
 - (b) Treasurer.
5. Report of standing committees:
 - (a) Arrangements.
 - (b) Scientific Work.
 - (c) Public Policy and Legislation.
 - (d) State Medicine.
 - (e) Medical Education.
 - (f) Tuberculosis.

- (g) Pathology.
- (h) Prevention of Venereal Diseases.
- (i) Conservation of Vision.
- (j) Credentials.
- (k) Necrology.
- (l) Medical Defense.
6. Report of Special Committees.
 - (a) Constitution and By-Laws.
7. Reading of Communications.
8. Reading of Memorials and Resolutions.
9. Unfinished Business.
10. New Business.

Election of officers will be the first order of business Friday morning.

CHARLES N. COMBS, Sec'y.



SECOND PRESBYTERIAN CHURCH

NOTICE TO COUNTY SECRETARIES

The sixth annual conference of the county secretaries will be held at 8:00 a. m., Thursday, adjourning in time to attend the general session at 9:30. The program will cover the following topics:

1. What THE JOURNAL does for the members and what the members owe to THE JOURNAL.
2. Our experience with medical defense compared to that in other states.

CHARLES N. COMBS, Sec'y.

ANNOUNCEMENT FROM THE COMMITTEE ON SCIENTIFIC WORK

Following the custom of previous years, the Committee on Scientific Work urges essayists and discussants to be brief, and to keep within

their subjects; furthermore, to be prompt, to the end that the program may be completed duly. The committee also wishes to call attention to the matter of communication between essayists and their discussants previous to the meeting. If possible, the completed paper should be submitted to the appointed discussants. The presentation of illustrative cases will add much to the value of contributions.

It is suggested that those discussants who desire to present subjects in a concise yet comprehensive manner will find it to their advantage to prepare discussions in advance, or at least to deliver their discussions from notes that have been prepared in advance.

General meeting, Auditorium of the Second Presbyterian Church, at 9:30 a. m.

AFTERNOON

Entertainment at Country Club for ladies, 2 p. m.
All section meetings, second floor Y. M. C. A. Building, 2 p. m.

EVENING

Address, Dr. Victor C. Vaughan, President American Medical Association, Auditorium Second Presbyterian Church, 8 p. m.

Reception and ball, Lincoln Club, 9:30 p. m.

Friday, September 25

MORNING

Meeting of the House of Delegates, Lecture Room, Second Presbyterian Church, 8 a. m.

Meeting of the Council at 11 a. m. in the lecture room, Second Presbyterian Church.

All section meetings, second floor Y. M. C. A. Building, 9 a. m.

Automobile ride for the ladies, 10 a. m.



WABASH VALLEY SANITARIUM

All manuscripts, including discussions that have been read, should be handed to the stenographer immediately after presentation.

With a view to facilitating the work of the stenographers and to give a better representation of the Association's work in *THE JOURNAL*, each discussant is especially urged to announce his full name and residence when getting up to speak.

CONDENSED PROGRAM

Wednesday, September 23

AFTERNOON

Meeting of the Council at 3 p. m. in the parlor of the Lahr House.

EVENING

Meeting of the House of Delegates, Auditorium of the Lincoln Club at 7 p. m.

Informal Smoker, Lincoln Club, 9 p. m.

Thursday, September 24

MORNING

Meeting of county secretaries at 8 a. m., second floor of Y. M. C. A. Building.

AFTERNOON

General meeting, Auditorium of the Second Presbyterian Church, 2 p. m.

ANNOUNCEMENTS

The members and those accompanying them are requested to register on their arrival. The Bureau of Information and Registration is in the Y. M. C. A. Building. Present your membership cards when registering. Members without their cards may register after their standing has been verified by consulting the records.

Members are reminded that they are required to designate under which section they wish to enroll, i. e., Surgical, Medical or Eye, Ear, Nose and Throat. You are requested to wear the official badge, which is supplied when you register, while attending or participating in the section meetings.

Ladies are especially urged to attend the entertainment given at the Country Club on Thursday afternoon, September 24, and to go on the automobile drive on Friday morning, September 25.

Section officers are requested to call meetings to order at the appointed hour, to keep a record of the time occupied by speakers, and to conduct the affairs of their respective sections so that the program will be completed in due season and without slighting any paper on the program. It is hoped that no injustice to essayists and others will be promoted by changing the order in which papers are expected to be presented.

The Lincoln Club, the Elks Club and the LaFayette Country Club are placed at the disposal of the members and guests.

Readers of papers are permitted to have 20 minutes, those opening the discussion of papers, 10 minutes, and other discussants, 5 minutes. No more time will be granted except by unanimous vote of the sec-

OFFICIAL PROGRAM OF THE ANNUAL SESSION OF THE INDIANA STATE MEDICAL ASSOCIATION

TO BE HELD AT LAFAYETTE, SEPT. 23,
24, 25, 1914

HOUSE OF DELEGATES

First meeting, Auditorium of the Lincoln Club, Wednesday evening, September 23, at 7 p. m.

Second meeting, Lecture Room, Second Presbyterian Church, Friday morning, September 25, 8 a. m.

COUNCIL

First meeting, Wednesday afternoon, September 23, at 3 p. m.



LA FAYETTE CLUB

tion before which the speaker is appearing. As extension of time is an injustice to other speakers and interferes with the proper carrying out of the program according to schedule, it is suggested that speakers should arrange to confine their papers or remarks within the limit assigned them.

The election of officers will be held at the meeting of the House of Delegates, Friday morning. No member of the House of Delegates is eligible to office, and delegates to the A. M. A. must have been members in good standing of the A. M. A. for the past two years.

With a view to facilitating the work of the stenographers and giving a better representation of the Association's work in the published proceedings in *THE JOURNAL*, each discussant is especially urged to announce his full name and residence when getting up to speak.

All manuscripts, including written discussions, that have been read, should be handed to the stenographer immediately after presentation.

GENERAL MEETINGS

(AUDITORIUM OF THE SECOND PRESBYTERIAN CHURCH)

Thursday, 9:30 a. m.

Invocation.

Address of welcome by the mayor of Lafayette.

Address of welcome by the president of the Tippecanoe County Medical Society.

Response and address by President Salb of the Indiana State Medical Association.

SYMPOSIUM—GOITER

1. (a) Diagnosis.

R. B. WEATHERILL, Lafayette.

Abstract.—Difficulty of classification due to lack of knowledge of functional relationship of ductless glands. Present classification based on presence or absence of toxiosis. Different types of goiter part of same pathologic process. Late toxic symptoms of simple goiter caused by hyper- or hyposecretion of gland. Significance of blood-count, blood-pressure, albuminuria or glycosuria in diagnosis. Tendency of goiter to change type. The simple becoming toxic and the toxic

simple goiter. Further study will separate present division into sub-groups each having a distinguishing syndrome.

2. (b) Pathology.

L. T. RAWLES, Fort Wayne.

Abstract.—An endeavor will be made to explain the pathology that occurs in a course of events associated with thyroid disease. The different pathologic conditions that are found will be explained from a symptomatic point of view as far as practical. The lantern slides are taken from those goiter cases of the more common variety and are used to explain certain things found clinically.

3. (c) The Selection and Preparation of Surgical Risks.

G. K. THROCKMORTON, LaFayette.

Abstract.—Mortality as compared with the present and past; also whether in simple or toxic goiter. Exclusive of other diseases. Contraindications in disease of thymus and other organs. Reasons for removal of thyroid gland in either simple or exophthalmic cases. Simple goiter most amenable to treatment.

If a general anesthetic be necessary, none but one well-trained should attempt to or be allowed to administer same.

Some cases of very large goiters, or sub-sternal goiters producing pressure symptoms, can be made more favorable risks by ligating superior thyroid arteries. In these cases the artery alone should be ligated.

Discussion opened by C. Stoltz, South Bend; E. A. Sturm, Jasper; Thos. Jones, Anderson.

Thursday, 8 p. m.

Address, Dr. Victor C. Vaughan, President American Medical Association.

Friday, 2 p. m.

1. Modern Methods in Diagnosis and Treatment of Cerebrospinal Fever. W. D. HOSKINS, Indianapolis.

Abstract.—Indiana may be visited soon by an epidemic of cerebrospinal meningitis. With modern methods of isolation, diagnosis and treatment, many lives may be saved. The disease is spread by contact



LA FAYETTE COUNTRY CLUB

Medical preparation and treatment, rest in bed, attention to complications, regulation of blood-supply, ligation.

4. (d) Medical Treatment.

WEIR M. MILEY, Anderson.

Abstract.—

5. (e) Surgical Treatment.

H. H. MARTIN, Laporte.

Abstract.—All cases of goiter producing symptoms and which have not improved or have been made worse by medical treatment should be operated.

The case that does not show improvement by rest, diet and general hygienic treatment, the heart still bad, remaining dilated, kidneys bad, prostration and general muscular weakness marked, mental and nervous balance not reestablished, should *not* be operated.

In acute cases of Grave's disease, if the heart is showing 1 inch or more of dilatation, the ligation of the superior thyroid vessels should be practiced, to be followed by further surgical procedure as is indicated.

If the necessary improvement does not follow ligation, the injection of boiling water into the gland substance should be resorted to.

It is possible to operate many goiters under local anesthesia. One-half of one per cent. novocain has given the best results with us.

but is only mildly contagious. The route of communication is through the secretions of the nasopharynx.

The most constant and distinctive clinical symptoms are severe, persistent headache and rigidity of the neck and limbs. The only pathognomonic feature is the presence of the meningococcus in the cerebrospinal fluid. The only efficient treatment is antimeningococcal serum. The presence of a purulent cerebrospinal fluid justifies the use of the serum on suspicion.

The serum is efficient if given early, i. e., within the first three or four days. It should be administered daily during the acute stage and every third or fourth day during convalescence. It must be given intraspinously.

Discussion opened by L. P. Drayer, Fort Wayne, and J. N. Hurty, Indianapolis.

2. How to Improve the Standing in Pharmacy in Indiana. C. B. JORDAN, Lafayette.

Abstract.—A discussion of the present condition obtaining in pharmacy in this state. Present requirements for entrance to the profession. Four years' experience in a store where prescriptions are compounded and the successful passage of an examination given by the State Board of Pharmacy. This standard too low. Result, a great many poorly trained pharmacists; hence, in many cases poor service to the

physician and to the public. Need for a higher standard for entrance to the profession. Need for a prerequisite law. Need for skillful laboratory workers. An ideal pharmacy. A plea to the physicians of the state to assist in raising the standard for entrance to the profession that they and the public may be better served.

Discussion opened by A. L. Walters, Indianapolis.

3. The Technic of the Wassermann Reaction.

BERNHARD ERDMAN, Indianapolis.

Abstract.—Outgrowth of the test from the original work in complement fixation of Bordet and Gengou.

Definition of terms: Antigen, Patient's Serum, Complement, Amboceptor or Hemolysin Red Blood Cells Suspension.

Preparation of the reagents. The original method of Bordet and Gengou. The methods of Moss, Noguchi, Craig and Nichols, Wassermann after Citron, and Field.

Importance of standardized antigen. Interpretation of results. Technical details.

Discussion opened by B. W. Rhany, Fort Wayne.

standing, the lower border of the stomach was found to be 3 inches below the umbilical plane, the extremes being 1½ to 4½ inches below the umbilical plane. When standing, the stomach is either J- or cow-horn shaped.

Thirty lantern slides illustrate investigation.

Discussion opened by A. M. Cole, Indianapolis, and W. A. Domer, Wabash.

2. Practical Considerations of Modern Ideas in Otolaryngology.

J. HEITGER, Bedford.

Abstract.—Importance of proper functioning of the upper respiratory tract in its relation to physical development, health and disease. Neglect of this knowledge, especially in early life, productive of faulty physical development and impairment of health.

A consideration of the ear, nose, epipharynx, pharynx and mouth as gateways of infection. Many obscure systemic infections owe their existence to foci of infection in these areas.

Role of modern otolaryngological ideas and instrumentarium in diagnosis and treatment. Passing of former conceptions of so-called "Catarrh of the ears and nose," asthma, rheumatism, neuralgia, scrofula, etc.



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MEDICAL SECTION

(SECOND FLOOR Y. M. C. A. BLDG.)

Thursday, 2 p. m.

1. The Position of the Normal Stomach with Observations on the Movements of the Diaphragm. (With Lantern Demonstration.)

BURTON D. MYERS, Bloomington.

Abstract.—Forty young adults, 19 to 26 years of age, twenty-eight men and twelve young women, were given a buttermilk-barium sulphate meal. Their stomachs were then examined fluoroscopically. Sheets of very thin tracing paper were placed on the fluoroscopic screen and tracing made of the stomach while filling, when full, in deepest inspiration and fullest expiration, accompanied by contraction of abdominal walls, the individual being in the erect position. These same tracings were repeated with the individual in horizontal position (on back). Roentgen-ray photographs were made of five cases, for comparison and check.

In males, when standing, the average position of the lower border of the stomach was found to be 1 inch below the umbilicus, the extremes being from 1 inch above to 3 inches below this plane. In females, when

Need of more exact diagnosis and more interchange of knowledge between the specialties and general medicine.

Discussion opened by Geo. F. Keiper, Lafayette, and L. F. Ross Richmond.

3. The Education of the Public to the Early Recognition of Cancer of the Uterus.

BERNAYS KENNEDY, Indianapolis.

Abstract.—Direct instruction of women is advocated. The object is to urge that early diagnosis is the real and practical hope for the cure of cancer and to disseminate this knowledge in a manner which will bring cancer to operation in the early stages when it can be cured positively and permanently.

The early symptoms of cancer of the uterus have to do with vague and slight disturbances of the function of menstruation and the recurrence of slight but irregular discharges without disturbance of sensation or necrotic discharge, and it is of the greatest importance that women should recognize the possible significance of various slight irregularities.

An educated medical profession is essential to the eradication of cancer, and an educated and interested public is no less necessary.



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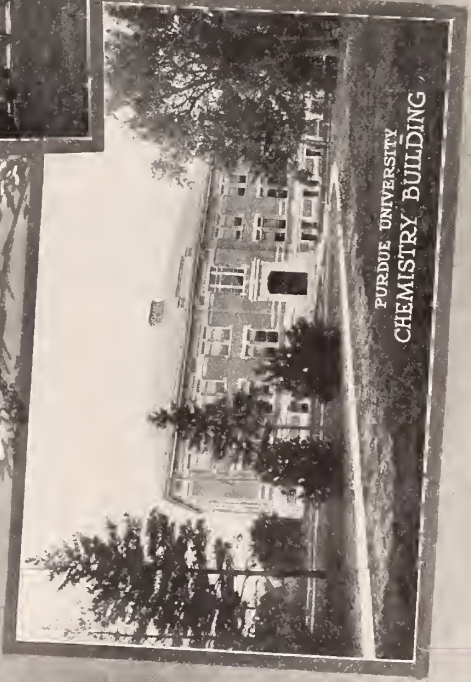
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The belief that cancer is incurable by operation is not based upon facts. The duty of the physician is to overcome the prejudices of his patients by tactful presentation of the case. It is fatal to the patient for the physician to wait for physical changes in the cervix, such as proliferation or degenerative changes. It is the physician's duty to the public to urge that such an attitude toward possible cancer of the uterus is absolutely unwarranted, unjustifiable, and culpable in the light of scientific knowledge.

Discussion opened by J. W. Kelsey, Attica, and H. H. Thompson, Noblesville.

4. The Management of Feeding Cases in Infancy.

J. H. TAYLOR, Indianapolis.

Abstract.—Cow's milk the food in artificial feeding. Malt-sugar the carbohydrate. Observe the principles of feeding, i.e., clean food, calories, over-feeding, intervals, etc., etc. The infant's behavior should be considered. Significance of spitting, crying, sleep, rest, colic, weight, stools. The cooperation of the nurse or mother essential. Self-feeding condemned as also handling, rocking or bouncing the baby.

An observance of all details in addition to food the "sine qua non" of success in the management of feeding cases.

Discussion opened by O. N. Torian, Indianapolis, and G. R. Green, Muncie.

similar substances. These ferments are also developed physiologically in the system with the physiological growth of various organs.

The technique of the test is simple, but requires absolute surgical cleanliness and care. The technique of the test is given. Reports of successful and unsuccessful cases, and experimental work.

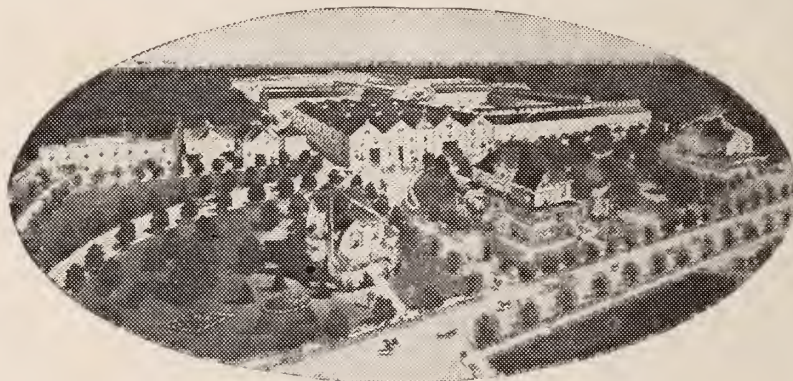
The reasons for unsuccessful work are first of all contamination and lack of cleanliness. The appearance in the blood stream of the amino acids gives the same reaction, wherefore it is necessary to take the blood at a time separated from the period of digestion. Where there is a stagnation of the intestinal contents, we seem always to get a positive reaction. A bacteremia also would give a positive reaction, so that where such is suspected, it would be desirable to run a blood culture for control.

In conclusion, the interpretation of the test is most important. A positive test does not necessarily indicate that a pregnancy exists, but a negative result may be taken as final that there is no living placental product present. The test should be of value to gynecologist and obstetricians and should help to make the practice of medicine take its place among the exact sciences.

3. Gas Anesthesia in Obstetrics.

ARTHUR GUEDEL, Indianapolis.

Abstract.—Nitrous oxide, diluted with varying quantities of air is the anesthetic agent used. Anesthe-



J. CROUCH & SON STOCK FARM

Friday, 9 a. m.

1. Better Obstetrics.

H. D. FAIR, Muncie.

Abstract.—The woman who performs the important functions of perpetuating the race is entitled to especial care. Much of the gynecologist's work is due to faulty obstetrics. Woman ought to be healthier and happier after birth of baby than before. The obstetrician who says his fee will be \$10 and then finds he has earned \$25 has no one but himself to blame. The best obstetrician must be versed not only in his particular science and art but must be an internist, surgeon and pediatricist. The pregnant woman should be so closely under her physician's care that pathology can be recognized and trouble averted or anticipated. It is not enough to know that we have a contracted pelvis; we must know the limits allowing a normal infant to pass. I contend that the abdominal binder has no place on a recumbent woman.

The author's lying-in room technique.

2. The Abderhalden Test in Pregnancy.

JANE KETCHAM, Indianapolis.

Abstract.—The sero-diagnosis of pregnancy is based upon the theory that the parenteral injection of foreign matter will bring into the blood stream an enzyme or ferment capable of digesting such foreign matter. Such a ferment is specific and will not act upon dis-

sia for each pain separately is the plan followed. Anesthesia may be started whenever suffering becomes great enough to merit its application, regardless of the state of labor at the time. Two methods of administration are used; in one the inhaler is held by an attendant, in the other, and better way, the patient holds the inhaler, applying it when she feels an approaching pain. The adjuvant application of hyosine in many cases facilitates the action of the gas.

Advantages of this anesthetic in obstetrics are:

- (a) Nitrous oxid is an innocuous gas and is not in any way harmful to either the parent or offspring.
- (b) There is no interference with the progress of labor.
- (c) Nitrous oxid acts rapidly and is quite efficient in individual pain anesthesia.
- (d) It does not destroy the normal tone of the uterus and hence protects against post partum hemorrhage and sepsis.
- (e) It seldom produces nausea and vomiting.
- (f) It is in no wise unpleasant to inhale.

Discussion opened by J. P. Ward, Vevay; L. Burkhardt, Indianapolis; R. E. Holder, Columbus; C. L. Cabalzer, Indianapolis.

4. Aids to Diagnosis in Pelvic Inflammation in Women.

ADA SCHWEITZER, Indianapolis.

Abstract.—Pelvic inflammations are infectious or non-infectious in origin. The more common infectious organisms are gonococcus, streptococcus, staphylococcus and colon bacillus.

Primary infections are likely to occur as a direct result of labor, abortion, instrumentation or gonorrhea. The secondary are due to an extension from an inflammatory focus as the appendix or bladder.

The manner in which the infection extends aids in diagnosis.

Blood cultures or cultures from cerebrospinal fluid may reveal the invading organism.

The Wassermann test aids in the diagnosis of syphilitic conditions. Much has already been accomplished in the application of the complement fixation test to obscure chronic gonococcus infections. In gonorrheal inflammations the focal reaction following the use of gonococcus vaccine is generally pathognomonic. The Abderhalden test may indicate recent or extra-uterine pregnancy. In tuberculous infections biologic tests may aid.

The exploratory operation is warranted where other means fail and the symptoms are acute or grave.

Both leukocyte count and temperature are likely to be higher in puerperal than gonorrheal cases.

Discussion opened by W. H. Baker, South Bend, and M. R. Combs, Terre Haute.

SURGICAL SECTION

(SECOND FLOOR Y. M. C. A. BLDG.)

Thursday, 2 p. m.

1. Surgical Tuberculosis of the Abdominal Cavity.

V. A. FUNK, Vincennes.

Abstract.—The organs of the peritoneal cavity frequented by tubercular infection. The symptom group in general. The significance of the sequestrae. Important that operator recognize extent and advancement of pathology with which he has to deal. Swaying of the pendulum with reference to conditions operable.

Discussion opened by G. T. MacCoy, Columbus, and Jewett V. Reed, Indianapolis.

2. Local Anesthesia in Major Surgery.

C. A. BECHTOL, Marion.

Abstract.—Historical. Anesthesia by hypodermatic injection dates from 1884. Schleich in 1891 reported 224 operations under local anesthesia. Most of the literature dates from 1909. Some clinics have reported from 40 to 55 per cent. of all operations by this method.

Indications. Nearly all operations can be done by means of local anesthesia. All are facilitated by it.

Contra-indications. Fretful or unreasonable patients. Some fat persons. Children. A rough operator.

Drugs and instruments. Personal experiences with cocaine, quinin and urea, novocain and adrenalin. Preparation of solutions. Syringes.

Methods of use. Local anesthesia alone. Local anesthesia combined with narcotics, ether or nitrous oxid. Infiltration and nerve blocking.

Personal experiences in various operations.

Discussion opened by C. M. Mix, Muncie, and Charles H. McCully, Logansport.

3. Why Surgery in Intestinal Stasis?

A. P. ROOPE, Columbus.

Abstract.—Definition to be understood. Clinical history of cases. Medical treatment. Its inefficiency in many cases.

Physiology of large bowel. Conditions interfering mechanically with bowel function. Resulting chronic colitis.

Treatment essentially surgical. Colectomy not justifiable. Choice of method and technic. Results.

Discussion opened by M. I. Rosenthal, Fort Wayne, and T. B. Eastman, Indianapolis.

4. Diagnosis and Treatment of General Peritonitis.

D. N. EISENDRATH, Chicago, Ill.

Abstract.—The object of the paper is to call the attention of the general practitioner to this subject, because it is within his power to help the surgeon by making a diagnosis within the first twenty-four to forty-eight hours. The paper is based upon a personal



TIPPECANOE BATTLE FIELD MONUMENT

experience of fifty-one cases operated during the past ten years.

A brief review of pathology shows that in the majority of cases surgical interference will turn the tide of battle if the absorption of toxins and bacteria from the peritoneal cavity can be checked. Drainage is only of avail during the first twenty-four hours after operation as shown by experiments.

The greater number of cases of general peritonitis arise in the right half of the abdomen. Appendicitis without or with perforation of the appendix forms the largest percentage of causes of peritonitis. Next in order are perforations of the stomach, duodenum and gall-bladder and infections of the female adnexa.

Resume of bacteriology shows that certain cases of virulent infection cause such rapid changes in the peritoneum and general intoxication that surgical intervention is of no avail.

Of clinical symptoms the most important are the history, the steady increase in pulse rate and the presence of generalized rigidity and tenderness. Vomiting if repeated and independent of taking food is also of value. Other signs are either so equivocal or appear so late that they are comparatively of little value. The use and abuse of the starvation treatment. In early cases the best results were obtained by rapidly removing or closing the focus of infection through a right sided incision, then draining the pelvis through a median suprapubic incision before the latter is closed. The after treatment aside from the Fowler position, whose value has been shown both clinically and experimentally, consists in the administration of tap water containing bicarbonate of soda and glucose, per rectum in order to combat acidosis. Eternal vigilance is the price of success, less such complications as acute gastric dilatation, infection of the abdominal wall, subphrenic abscess, etc., arise. Certain virulent cases die no matter what form of treatment is

pleading for a wider employment of the operation instead of the use of the mutilating procedures, and also instead of prolonged and difficult forceps operations with their consequent danger of maternal infection and injury to the fetus.

Discussion opened by J. B. Berteling, South Bend, and W. H. Williams, Lebanon.

3. Diagnosis and Surgical Treatment of Goiter.

GOETHE LINK, Indianapolis.

Abstract.—(a) Diagnosis of simple goiter causing pressure in the neck. Substernal goiter.

(b) Diagnosis of hyperthyroidism with hyperplasia and of toxic non-hyperplastic goiter. Examples of most common mistakes in diagnosis. Toxic goiter as a medical, surgical and obstetric complication.

(c) The danger of improper medical treatment of all forms of goiter. Iodin medication.

(d) Surgical treatment of simple goiter; low mortality; quick recovery; good results.

(e) Surgical treatment of toxic goiter; choice of operation and time of operation. Factors of danger and safety. Results.



ST. ELIZABETH'S HOSPITAL

employed. The author's statistics show clearly, however, that aside from such cases the mortality can be reduced to 5 per cent.

Discussion opened by J. R. Eastman, Indianapolis, and M. F. Porter, Fort Wayne.

Friday, 9 a. m.

1. Ectopic Pregnancy. EDGAR COX, Kokomo.

Abstract.—The importance of early diagnosis of extra-uterine pregnancy. If the patient is seen early the diagnosis can often be made prior to the rupture of the tube.

Surgery, in the author's opinion, is the only rational treatment in extra-uterine pregnancy.

Report of cases.

2. Indications for Cesarean Section.

W. F. HOWAT, Hammond.

Abstract.—A brief review of the history of Cesarean section; also the indications as given by the authorities in the past, and personal views of the author,

(f) Consideration of author's experience in thyroid surgery. Management of cases and operative technic. (Case reports. (Lantern slide demonstration.)

Discussion opened by J. P. Cook, New Albany, and G. G. Graessle, Seymour.

4. A Series of Filiform Appendices (with lantern slide demonstration.)

HARRY K. BONN, Indianapolis.

Abstract.—Definition, description and frequency of filiform appendices. This type of appendix first described by J. R. Eastman. The principal types of these anatomic oddities. Etiology: the state of the terminal ileum, cecum and ascending colon in cases of filiform appendices. The varying degrees of this type of appendix. Gross and microscopic pathology. Microscopic appearance of serial sections. Symptoms. Diagnosis. Treatment.

Discussion opened by G. G. Eckhart, Marion.

5. A Technic of the Roentgen Ray Massive Dose in Carcinoma of Deep Structures.

J. N. MCCOY, Vincennes.

Abstract.—Classification of Roentgen rays as to quality. Vacuum of tubes with relation to quality of rays. Tolerance of skin to Roentgen rays. Quality of rays most active in producing radio-dermatitis. Exclusion of soft rays in treatment of deep seated carcinoma. Methods of Roentgen-ray attack on cancer. Physiologic effect of rays. Glycogenic feeding of cancer cells. Brault research. Essential to reach seat of disease with the rays. Heavy dosage necessary. Efforts limited by intolerance of skin. Elimination of soft rays. Filters and their purpose. Filters of necessary resisting power. Resisting power the essential thing in filter. Measurement of Roentgen-ray dose. Radiometers. Method of using radiometer. Position of reaction pastille. Focal distance in relation to use of radiometer. Focal distance in relation to area of treatment field. Atmosphere a filter. Gauss treatment method. Author's modification of Gauss method. Case reports. Conclusions.

Discussion opened by E. O. Lindemuuth, Indianapolis, and A. R. Simons, Laporte.

EYE, EAR, NOSE AND THROAT SECTION

(SECOND FLOOR Y. M. C. A. BLDG.)

Thursday, 2 p. m.

1. Our Obligations as Specialists.

WALTER N. SHARP, Indianapolis.

Abstract.—We are responsible for the proper diagnosis, treatment and prognosis of disease. Patients look upon us as specialists in our chosen profession—men who should know every feature of their case. Are we deserving of the confidence imposed in us unless we are honest with our patients and ourselves? Do we fulfill our obligations by a slipshod examination and diagnosis?

In the case of fundus disease, we cannot make a diagnosis of syphilis without going over the case thoroughly, and finally resorting to a Wassermann test.

With a case of cataract, are we more anxious for the fee than the good of the patient when we advise extraction before the proper time? Is it for the best interest of the patient that we attempt an intracapsular operation without having had sufficient experience or special training?

We should avoid enucleation in every case if not absolutely necessary.

If we have a case with which we hesitate as to just what course to pursue, do we call council or do we think we know as much as the other fellow? No man is sufficient unto himself alone.

When we consider the great number of blind in our country alone—blindness which might have been prevented by timely and proper treatment—we will consider our obligations to mankind as great in the field of prevention as that of cure.

Ophthalmology is one of the best specialties in medicine, yet it is one of the most abused.

It is one thing to have an office full of expensive apparatus, and quite another thing to be able to use it to advantage. The man who attempts to deceive his patients by such psychologic means nowadays, is simply making a fool of himself.

2. The Borderline Topics in Ophthalmology and Otolaryngology.

JOSEPH C. BECK, Chicago.

Abstract.—(a) The relation of nose, throat and ear affections to tubercular and non-tubercular glandular involvement.

(b) Malignant diseases of the nose, throat and ear and their secondary involvement in the neck.

(c) Intranasal management versus external of nasal deformities.

(d) Discussion of the various routes reaching the hypophysis with description of writer's method.

(e) A few remarks in reference to the present status of diagnosis and treatment of intracranial complications.

Discussion opened by E. deWolfe Wales, Indianapolis, and F. A. Morrison, Indianapolis.

3. The Diagnosis and Treatment of Simple Glaucoma.

ALBERT E. BULSON, JR., Fort Wayne.

Abstract.—Insidious onset of the disease and importance of early recognition. Premonitory symptoms. Contraction of the field of vision antedating failure of central vision. Ophthalmoscopic findings. Blood-pressure. Value of the tonometer. Regulation of the habits of the patient. Use of miotics. Operative treatment, including trephining. Reports of instructive cases.

Discussion opened by D. W. Stevenson, Richmond, and L. D. Brose, Evansville.

4. The Bronchoscopic Treatment of Spasmodic Asthma.

GEORGE F. KEIPER, Lafayette.

Abstract.—History of the development of treatment. Work of Nowotny, Galebsky and Tretrop, Ephriam, Heilskov and Mahler, Horn, Freudenthal and Large. Nature of spasmodic asthma. A local affection and not a neurosis. Observations. Report of a case successfully treated.

Discussion opened by J. F. Barnhill, Indianapolis, W. J. Leach, New Albany.

5. Trachoma in Indiana.

E. M. SHANKLIN, Hammond.

Abstract.—Trachoma has recently become one of the widely discussed topics; the medical profession rapidly becoming convinced that it must be subject to regulation. Reports from oculists in about 75 per cent. of the counties of the state show that in many districts this disease is quite prevalent. The State Board of Health has placed trachoma among the reportable diseases, though very few physicians are reporting their cases.

The economic and sociologic phases are not the least important in the discussion of trachoma. Many counties are put to great expense in caring for trachoma victims, some of whom, under proper treatment, would soon be able to care for themselves.

Many general practitioners are extremely lax in the handling of cases, and much of the general opinion that "granulated lids" is but a transient thing may be laid at their door.

Publicity is our greatest asset in fighting a disease that causes blindness in 75 per cent. of untreated cases. While trachoma is not a menace to Indiana, such as it is in eastern Kentucky, yet it is prevalent to such an extent as to cause us to adopt more stringent regulations for its eradication.

Tabulation of reports from physicians in various parts of Indiana, together with recommendations as to trachoma regulation and prevention.

Discussion opened by Geo. F. Keiper, Lafayette, and W. A. Hager, South Bend.

Friday, 9 a. m.

1. Nasal Polypi.

GEORGE F. SPOHN, Elkhart.

Abstract.—Formation. Location. Cause. Differential diagnosis. Sequellae. Removal. Prognosis. Treatment.

Discussion opened by W. S. Tomlin, Indianapolis, and D. W. Layman, Indianapolis.

2. Tumors of the Eye.

F. C. HEATH, Indianapolis.

Abstract.—This paper consists of a brief report of a series of cases, representing different types of ocular tumors, their symptoms, pathology and treatment with some lessons that, it seemed to the author, could fairly be drawn from their study.

Discussion opened by T. C. Hood, Indianapolis, and J. McCall, Terre Haute.

3. A Case of Relapsing Iritis Apparently Cured by the Use of Autogenous Vaccines.

H. C. PARKER, Indianapolis.

Abstract.—History of case. Preparation of vaccines. Method of treatment. Results. Comments on vaccine treatment of eye lesions.

Discussion to be opened by K. K. Wheelock, Fort Wayne, and M. T. Jay, Portland.

4 Report of a Few Cases of Incipient Cataract Treated by Subconjunctival Injections of Mercury.

A. B. KNAPP, Vincennes.

Abstract.—Paper based on personal experience of the writer. Suggestions of treatment coming from paper written by Colonel Smith, of India. Character of cases treated. Method of treatment. Results. Report of cases.

Discussion opened by F. C. Heath, Indianapolis, and Bleeker J. Knapp, Evansville.

5. Some Effects of Light upon the Eye.

W. F. HUGHES, Indianapolis.

Abstract.—Certain pathologic conditions of the eye, such as eclipse blindness, snow blindness, electric lighting cataract, etc., evidently are due to the harmful effect of light. Other disease conditions as well as loss of efficiency often seem to be ascribable more or less remotely to injurious rays or defective illumination. The eyes of mechanics should be protected when exposed to harmful rays.

Practically all lighting systems use daylight, direct or indirect artificial light, or a combination of these. Within the past few years more attention is being given to the effect of light on the eye by the engineer in planning lighting systems. Natural light has a wide distribution due to the many reflections which have occurred before it reaches the eye. The loss of efficiency of the eye under direct illumination is very much more rapid than under indirect. The physiologist and oculist should be consulted in the formation of lighting plans.

Discussion opened by J. W. Hadley, Frankfort, and F. C. Heath, Indianapolis.

REPORT OF TREASURER

David W. Stevenson, Treasurer, in account with the Indiana State Medical Society.

CONDENSED REPORT

DEBIT

| | |
|--|------------|
| To cash on hand, see JOURNAL Sept., 1913 | \$3,491.79 |
| To cash, secretary, 2,611 members | 5,222.00 |
| To cash, nine exhibitors' booths at \$20 | 180.00 |
| Total | \$8,893.79 |

CREDIT

| | |
|--|------------|
| By cash for 2,611 subscriptions to THE JOURNAL | \$1,958.25 |
| By cash to J. R. Eastman, Medical Defense Fund | 1,958.25 |
| By cash to councilors | 107.63 |

| | |
|---|------------|
| By cash, printers | 287.05 |
| By cash, stenographers | 286.04 |
| By cash, Chas. N. Combs, honorarium and expenses | 336.71 |
| By cash, G. E. Gallup, expenses, West Baden meeting | 3.00 |
| By cash, A. D. Rhinehart, drawings for Dr. Alburger | 60.00 |
| By cash, Committee on Conservation of Vision | 3.41 |
| By cash, Committee on Pathology | 39.70 |
| By cash, Committee on Necrology | 10.00 |
| By cash, Committee on Prevention of Blindness | 17.90 |
| Total | \$5,067.94 |
| To balance on hand | 3,825.85 |
| Grand Total | \$8,893.79 |

Respectfully submitted Aug. 8, 1914.

(Signed) DAVID W. STEVENSON.

REPORT OF SECRETARY

House of Delegates, Indiana State Medical Association:

Gentlemen:—For the nine months ending Sept. 1, 1914, the paid-up membership is 2,530, as compared with 2,480 Sept. 1, 1913; 2,387 Sept. 1, 1912, and 2,342 Sept. 1, 1911. This is by no means a phenomenal increase and yet it indicates that the Association is in a state of continued good health. There are at present but 196 delinquents, comprising that decreasing class of physicians who seem to derive satisfaction from worrying the county secretary all the year and finally paying up in December. After these eleven months of proud independence in respect to the county society, these same physicians are very humble when asking for a certificate of continuous membership in order that they may secure reciprocity in moving to another state.

At the close of last year there was an organization in 90 out of the 92 counties. There have been no additions this year, but Dr. Nesbit, the new councilor for the Tenth District, reports that the prospects are very favorable for an organization yet this year in Newton County, which will leave Brown County alone out of the jurisdiction of the Association. So far this year 32 counties have made gains over last year and 17 have an equal membership.

The tabulated report of the councilor districts is herewith submitted. Its value, however, is somewhat discounted by reason of its late appearance, as it is for the calendar year 1913. Many of these reports were received within the last thirty days, and it seems to be an almost impossible task to get the reports promptly. It will be the aim next year to publish this report in the February number of THE JOURNAL while it is timely, but it will take the efforts of the retiring secretaries for this year to do so.

The constitution and by-laws under which we are acting still contain many anachronisms, inconsistencies and deficiencies, and it is to be hoped that the Council will recommend to the House of Delegates amendments covering all such so that the amendments can be received this year and permanently adopted one year hence. Such questions as how much money can the House of Delegates spend without the consent of the Council, and how much money the Council can spend without the consent of the House of Delegates, just when the newly elected councilor takes his seat of office, whether a councilor can be elected to the presi-

COUNCILLORS' REPORTS

FIRST DISTRICT

| Counties | Physicians in County | Number in County Society | Eligible Non- Members | Number of Society Meetings | Attendance | Number of Scientific Papers | Number of Case Reports | Number of Visits of Councillor |
|------------------|----------------------------|--------------------------------|-----------------------------|----------------------------------|------------|-----------------------------------|------------------------------|--------------------------------------|
| Pike | 32 | 16 | 6 | 4 | 7 | 8 | ... | .. |
| Gibson | ... | 38 | .. | .. | .. | .. | ... | .. |
| Posey | 30 | 20 | 13 | 4 | 9 | 4 | 1 | .. |
| Vanderburg | 125 | 90 | .. | 20 | 15 | 20 | 100 | .. |
| Warrick | 40 | 17 | 21 | 6 | 8 | 6 | 10 | .. |
| Spencer | 32 | 21 | 12 | 6 | 9 | .. | ... | .. |
| Perry | 25 | 8 | 9 | 4 | 5 | 2 | 2 | .. |
| Totals..... | 284 | 210 | 61 | 44 | 53 | 40 | 113 | .. |

SECOND DISTRICT

| | | | | | | | | |
|----------------|-----|-----|----|----|----|----|----|----|
| Sullivan | 39 | 36 | 4 | 11 | 7 | 23 | 5 | 1 |
| Knox | 64 | 45 | 14 | 12 | 19 | 30 | 15 | ? |
| Daviess | 32 | 27 | 3 | 10 | 7 | 6 | 10 | .. |
| Martin | 14 | 14 | .. | 3 | 7 | .. | 22 | 1 |
| Monroe | 32 | 19 | 12 | 12 | 20 | 15 | 6 | .. |
| Owen | 22 | 20 | 3 | 5 | 6 | 8 | .. | .. |
| Greene | 37 | 26 | 9 | 8 | 12 | 8 | 10 | 1 |
| Totals..... | 240 | 187 | 45 | 61 | 78 | 90 | 68 | 3 |

THIRD DISTRICT

| | | | | | | | | |
|------------------|-----|-----|----|----|----|----|----|----|
| Clark | 46 | 21 | 12 | 4 | 5 | .. | .. | .. |
| Crawford | ... | 9 | .. | .. | .. | .. | .. | .. |
| Dubois | 29 | 19 | 10 | 12 | 15 | 24 | .. | .. |
| Lawrence | 32 | 26 | 5 | 8 | 5 | 8 | 7 | 5 |
| Orange | ... | 20 | .. | .. | .. | .. | .. | .. |
| Floyd | 52 | 31 | 5 | 7 | 9 | 2 | 1 | 1 |
| Harrison | 28 | 15 | .. | 2 | 8 | 4 | .. | .. |
| Scott | ... | 6 | .. | .. | .. | .. | .. | .. |
| Washington | 21 | 3 | .. | 6 | 7 | 6 | 2 | .. |
| Totals..... | 208 | 150 | 32 | 39 | 49 | 44 | 10 | 6 |

FOURTH DISTRICT

| | | | | | | | | |
|---------------------|-----|-----|----|----|----|----|-----|----|
| Decatur | 36 | 18 | 10 | 16 | 6 | 36 | 64 | .. |
| Bartholomew | 38 | 25 | 11 | 9 | 10 | 8 | .. | 1 |
| Jackson | ... | 25 | .. | 6 | 8 | 2 | 2 | .. |
| Jennings | 20 | 20 | .. | 10 | 10 | 4 | 21 | 10 |
| Jefferson | 25 | 19 | 7 | 13 | 9 | 6 | 8 | .. |
| Ripley | 25 | 13 | 12 | 3 | 6 | 5 | 2 | .. |
| Dearborn-Ohio | ... | 25 | 5 | 12 | 10 | 8 | 3 | .. |
| Switzerland | 13 | 9 | 3 | 1 | .. | .. | ... | .. |
| Totals..... | 157 | 154 | 48 | 70 | 59 | 69 | 100 | 11 |

FIFTH DISTRICT

| | | | | | | | | |
|------------------------|-----|-----|----|----|----|----|----|----|
| Vigo | ... | 93 | .. | .. | .. | .. | .. | .. |
| Parke-Vermillion | 68 | 23 | 31 | 9 | 12 | 5 | .. | 1 |
| Clay | 46 | 28 | .. | 5 | 10 | 5 | 6 | .. |
| Putnam | 34 | 21 | 13 | 6 | 12 | 5 | .. | .. |
| Totals..... | 148 | 165 | 44 | 20 | 34 | 15 | 6 | 1 |

SIXTH DISTRICT

| | | | | | | | | |
|----------------|-----|-----|----|----|----|----|----|----|
| Hancock | 36 | 15 | .. | 3 | 6 | 1 | 12 | .. |
| Henry | ... | 27 | .. | .. | .. | .. | 5 | .. |
| Fayette | 20 | 13 | 2 | 4 | 5 | 3 | 5 | .. |
| Franklin | ... | 4 | 15 | 4 | 3 | 3 | 10 | .. |
| Rush | 35 | 22 | 2 | .. | .. | .. | .. | .. |
| Union | 8 | 7 | 6 | 5 | 5 | 10 | 4 | .. |
| Shelby | 41 | 18 | 21 | 5 | 7 | 6 | 5 | .. |
| Wayne | 75 | 54 | 8 | 15 | 20 | 40 | 4 | .. |
| Totals..... | 215 | 160 | 54 | 36 | 46 | 63 | 40 | .. |

SEVENTH DISTRICT

| | | | | | | | | |
|-----------------|-----|-----|----|----|----|----|----|----|
| Hendricks | 40 | 26 | 2 | 14 | 15 | 15 | 6 | 1 |
| Johnson | 43 | 14 | 25 | 12 | 8 | 12 | 15 | 1 |
| Marion | ... | 287 | .. | 35 | 64 | 34 | 40 | 12 |
| Morgan | ... | 15 | .. | 3 | 8 | 3 | 4 | 1 |
| Totals..... | 83 | 342 | 27 | 64 | 95 | 64 | 65 | 15 |

COUNCILLORS' REPORTS—CONTINUED

EIGHTH DISTRICT

| Counties | Physicians in County | Number in County Society | Eligible Non- Members | Number of Society Meetings | Attendance | Number of Scientific Papers | Number of Case Reports | Number of Visits of Councillor |
|-----------------|----------------------------|--------------------------------|-----------------------------|----------------------------------|------------|-----------------------------------|------------------------------|--------------------------------------|
| Blackford | 25 | 17 | 5 | 6 | 6 | .. | .. | 1 |
| Delaware | 116 | 52 | 3 | 14 | 20 | 10 | 6 | 12 |
| Jay | 47 | 19 | 5 | 8 | 6 | 10 | .. | 1 |
| Madison | 90 | 50 | .. | 10 | 17 | 20 | 15 | 1 |
| Randolph | 40 | 23 | 6 | 6 | 8 | 6 | 16 | 1 |
| Totals..... | 318 | 161 | 19 | 44 | 57 | 46 | 37 | 16 |

NINTH DISTRICT

| | | | | | | | | |
|-------------------|-----|-----|----|----|----|----|----|----|
| Fort Warren | 56 | 36 | 8 | 4 | 14 | 10 | 4 | .. |
| Tippecanoe | 64 | 52 | 5 | 17 | 16 | 12 | 42 | .. |
| Montgomery | 72 | 36 | 28 | 8 | 11 | 9 | .. | .. |
| Clinton | 52 | 22 | .. | 12 | 11 | 21 | .. | .. |
| Boone | 49 | 16 | 11 | 8 | 7 | 12 | 15 | .. |
| Hamilton | 60 | 20 | 15 | 12 | 10 | 12 | 12 | .. |
| Howard | 55 | 29 | 9 | 9 | 9 | 8 | 4 | .. |
| Tipton | 31 | 15 | 8 | 4 | 8 | 2 | .. | .. |
| Totals..... | 439 | 226 | 84 | 74 | 86 | 86 | 77 | .. |

TENTH DISTRICT

| | | | | | | | | |
|---------------|-----|-----|----|----|----|----|----|----|
| Lake | 133 | 84 | 34 | 11 | 17 | 9 | 16 | 1 |
| Porter | 25 | 20 | .. | 5 | 7 | 12 | 6 | 1 |
| Jasper | 13 | 10 | .. | .. | .. | .. | .. | .. |
| Laporte | 56 | 50 | .. | 8 | 23 | 9 | 18 | .. |
| Benton | 20 | 14 | .. | .. | .. | .. | .. | .. |
| Totals..... | 247 | 178 | 34 | 24 | 47 | 30 | 40 | 10 |

ELEVENTH DISTRICT

| | | | | | | | | |
|------------------|-----|-----|----|----|----|----|----|----|
| White | 32 | 9 | .. | .. | .. | .. | .. | .. |
| Carroll | 38 | 28 | 5 | 6 | 9 | 6 | .. | .. |
| Cass | 58 | 42 | 1 | 36 | 12 | 46 | 61 | .. |
| Miami | 60 | 30 | 5 | 10 | 14 | 9 | 5 | .. |
| Wabash | 35 | 15 | .. | 3 | 10 | 6 | .. | 2 |
| Grant | 70 | 42 | 4 | 12 | 19 | 9 | .. | 12 |
| Huntington | 42 | 36 | 8 | 12 | 12 | 17 | 4 | 1 |
| Totals..... | 335 | 202 | 23 | 79 | 76 | 93 | 70 | 15 |

TWELFTH DISTRICT

| | | | | | | | | |
|----------------|-----|-----|----|----|----|-----|-----|----|
| Lagrange | 20 | 11 | .. | 12 | 10 | 20 | 1 | .. |
| Noble | 31 | 29 | .. | 4 | 21 | 9 | 5 | .. |
| Whitley | 24 | 18 | 3 | 6 | 10 | .. | .. | .. |
| Wells | 33 | 26 | 4 | 16 | 9 | 12 | 24 | 1 |
| Adams | 23 | 19 | 4 | 10 | 8 | 8 | 2 | 1 |
| Allen | .. | 94 | 11 | 40 | 20 | 40 | 35 | 30 |
| DeKalb | 30 | 19 | .. | 9 | 8 | 12 | 10 | .. |
| Steuben | 27 | 14 | 10 | 12 | 10 | 25 | 50 | .. |
| Totals..... | 168 | 230 | 32 | 97 | 86 | 106 | 126 | 32 |

THIRTEENTH DISTRICT

| | | | | | | | | |
|-----------------|-----|-----|----|----|----|----|----|----|
| St. Joe | 112 | 69 | 34 | 20 | 18 | 17 | 43 | .. |
| Pulaski | 18 | 5 | 13 | 2 | 6 | 1 | 2 | .. |
| Fulton | 23 | 14 | 13 | 12 | 10 | 11 | .. | .. |
| Marshall | 37 | 25 | 13 | 11 | 10 | 19 | .. | .. |
| Elkhart | 85 | 53 | .. | 10 | 27 | 20 | 2 | .. |
| Kosciusko | 47 | 22 | .. | 10 | 9 | 5 | 7 | 4 |
| Starke | 10 | 7 | 3 | 7 | 12 | 9 | .. | 2 |
| Totals..... | 332 | 195 | 76 | 72 | 92 | 82 | 54 | 6 |

dency, etc., should be decided definitely so that the secretary will not be embarrassed for the want of specific instructions.

Last year Dr. Kimberlin gave a complimentary breakfast as an inducement for the secretaries to attend the secretaries' conference. The increased attendance at that meeting would suggest that the associa-

tion could at an expense of not more than \$25 a year make this a permanent feature. It would be a recognition of the value of the services rendered to the Association by the county secretaries, which would encourage them to continue their faithful activities even though their salaries were not doubled by the local society. After a hard year's work there is little

inducement for them to forego some pleasure in order to attend an additional meeting at the annual session which is for the purpose of training them to do more work for the next year.

Respectfully submitted,
CHAS. N. COMBS, Secretary.

REPORT OF COMMITTEE ON ARRANGEMENTS

House of Delegates, Indiana State Medical Association:

Gentlemen:—The Tippecanoe County Medical Society with its sixty odd members and a long and honorable history of endeavor, bids the Indiana State Medical Association welcome to Lafayette on the occasion of the sixty-fifth annual session. Believing that we assemble for earnest work rather than for frivolous pleasure, we are not boastful as to our beautiful city, its contents and environs, fearing that such a course would detract from the value of the session. However, if on pleasure bent, our city, the Star City of Indiana, is well worth seeing. Purdue University, our chief industry, is well worthy of careful inspection. Our hospitals are among the largest and best in the state, and our hope is to have arranged some clinics at both the St. Elizabeth and Home Hospitals, which will not conflict with the hours of the various meetings. The plant of the Box Board Factory has the largest paper machine constructed up to date. Historic associations cluster around the Tippecanoe battle field where on Nov. 7, 1811, Gen. William Henry Harrison defeated the Indians under the Prophet and thus opened the northwest to white settlement. Lovers of fine horse flesh will find the stables of Crouch & Son filled with the best that Europe affords. The State Soldiers' Home, caring for those who in their youth saw to it that our Union of States was preserved intact, attracts thousands of visitors annually. Our city park with its menagerie is a beautiful spot.

We had hoped to have the meetings at Purdue University, but the university is very difficult of access because our new bridge across the Wabash is not complete. Therefore the Y. M. C. A. Building and the Second Presbyterian Church across the street will be our meeting places. The sections will meet on the second floor of the Y. M. C. A. Building, and the exhibits will be placed on the first floor. The general meetings will be held in the auditorium of the Second Presbyterian Church, and the House of Delegates will meet in its Lecture Room. The initial meeting of the House of Delegates will be held in the auditorium of the Lincoln Club, on Wednesday evening, September 23.

Registration will begin Wednesday afternoon at the Y. M. C. A. Building. Members are requested to register as soon as possible after arrival in the city, and thereafter to present themselves to the committee on hotels and accommodations if not already assigned to quarters. This committee will occupy a desk immediately adjacent to the registration desk. Inasmuch as our hotel accommodations have been curtailed it will be wise for members who will attend this session to write immediately Dr. A. C. Arnett, chairman of said committee.

The Tippecanoe County Medical Society will give a smoker the evening before the first scientific meeting. The Lincoln Club Building will be turned over to the doctors. Plenty of light refreshments, cigars and soft drinks will be served, and those who may

be so inclined may play cards and billiards. Our members will be out *en masse* to see that all get acquainted and have a good time.

On the evening of the 24th (Thursday), the Tippecanoe County Medical Society will tender a complimentary reception and ball to the visiting doctors and their ladies. This will be held at the Lincoln Club. While a "swallow-tail" is in order on such occasions let no one stay away because he may not possess one, as it is not essential to a good time.

We have not forgotten to provide for the ladies. The scientific program will be too stiff for them and so we have appointed a committee to look after their comfort and pleasure. Mrs. C. B. Kern is chairman of this committee. On Thursday afternoon at the Country Club will be held an entertainment for the ladies. Plenty of automobiles will be provided to convey them to and from the club. The ladies will be given drives around and about the city on Friday morning.

To one and all we extend a hearty invitation to attend this session which though it may not be a banner one, we trust will be as enjoyable.

Fraternally.

GEORGE F. KEIPER, Chairman,
ADA McMAHAN,
W. R. MOFFITT,
EDW. B. RUSCHLI,
OLIVER P. TERRY,
Committee on Arrangements.

REPORT OF COMMITTEE ON PUBLIC POLICY AND LEGISLATION

House of Delegates, Indiana State Medical Association:

Gentlemen:—No active work has been undertaken by this committee during the past year as there has been no meeting of the legislature and no matters of importance requiring action by the committee have been called to its attention. It may be suggested that during the coming year there will be a meeting of the Indiana Legislature and that the committee appointed at the 1914 session of the Indiana State Medical Association will probably have some important matters to consider. The work of the next committee will doubtless involve the duty of opposing objectionable bills of various kinds which will be presented to the Indiana Legislature.

During the last legislature there was an antinarcotic bill passed known as the Keegan Bill, which had many excellent features in it, but which in its original form contained paragraphs which would have prevented licensed physicians, dentists and veterinarians from administering these drugs without first writing a prescription and sending it to a licensed pharmacist for filling. The bill was proposed by the State Board of Pharmacy and was written in the interest of the wholesale and retail drug trade. It provided clauses which would permit the unlimited sale of narcotic drugs by licensed pharmacists but would prevent their use by physicians, dentists and veterinarians except under written prescription. The profession of the state vigorously opposed the bill in its obnoxious form and it was amended so as to exclude the principal objectionable features.

There is a bill now pending in the United States Congress, known as H. R. 6282. An effort has been made to reincorporate in this bill a clause requiring physicians to not only write prescriptions but

keep a detailed written record for periodical inspection of the authorities, which record proposed to register every dose of a narcotic given. The profession of Indiana and the country at large is greatly indebted to Senator John W. Kern for vigorous opposition to these objectionable features and their removal from the bill. The bill is an antinarcotic bill and has some good features. The modified bill is now in the hands of the Conference Committee of the Senate and the House of Representatives and within the past week an effort has been made to get this committee to approve an amendment restoring the objectionable clauses which provided for record of every dose of any narcotic administered by a physician, dentist and veterinarian. At this writing the indications are that the objectionable amendment will not be incorporated.

Another matter of interest which will necessitate consideration of the next session of the Indiana Legislature and which calls for active interest of every member of the Association is an amendment to our medical legislation and licensing laws which will better provide for the legal annual revision of names of those actually entitled to practice medicine in Indiana. The importance of the amendment and its relation to the progressive educational work of the State Board could better be appreciated if the Indiana State Medical Association had a representative on the State Board of Registration and Examination who was officially endorsed and recommended by this Association as is the case of the other schools of medicine now represented on this Board. Necessarily to a great extent the educational work conceived and approved by this Association can make but little progress until the Indiana State Medical Association is given representation on the Board. The history of the original passage of our medical law on the initiative of the Association, together with the work of the Board, the manner of its appointment and the results accomplished, have been sufficiently set forth in former reports of this committee.

Respectfully submitted,
WM. N. WISHARD, Chairman.
A. M. HAYDEN.

REPORT OF COMMITTEE ON STATE MEDICINE

House of Delegates, Indiana State Medical Association:

Gentlemen:—The persistent work during recent years of the department of health and the numerous societies looking to the limiting of preventable disease, impresses itself more forcibly on the public mind from year to year.

The extermination of the spreaders of disease is now sought not only from the standpoints of business and personal safety, but is coming to be heeded by those who are prone to disregard threatened danger of any kind, as well as the reckless contingent who are not concerned with needless and extravagant waste. The latter classes find themselves identified with the clean-up movement because of the now well-accepted truth that the house in which flies breed and abound and about which rats are on friendly terms with the family, is a filthy house and prompts all but the hopelessly unclean to join in exterminating the disseminators of filth and disease.

The setting apart, by the governor of Indiana, of a day to be designated and known as disease prevention day, designed to be observed by all the people

in all parts of the state, is most gratifying in that it is a distinct step toward the practical application of recognized health rules.

With a view of determining the effects of the house fly on infant mortality, the Bureau of Public Health and Hygiene of the Social Welfare department for improving the condition of the poor in New York City conducted an experiment during the summer of 1913. According to the report of Dr. Armstrong, director of the department, a striking reduction of morbidity among the protected infants was obtained. During the present summer, the investigation is being continued with twelve hundred selected infants, separated into protected and unprotected groups. It may be assumed that the conclusions of last year in favor of fly-free babies will be verified by the more thorough test now going on.

Most favorable results are reported from anti-typhoid vaccination in the U. S. Army during the year 1913, by Dr. Frederick F. Russell of the U. S. Army Corps. Among more than ninety thousand men but three cases of typhoid occurred, with no deaths. Of the thirty-one thousand men in the service outside of the United States, many of whom were stationed in the tropics, but one contracted typhoidal disease in the year 1913. Beginning with the year 1911, when compulsory vaccination was inaugurated in the army, typhoid has gradually lessened till the loss of time is at a minimum and the mortality is nil. During the year 1908, when sanitary measures alone were relied on to repress typhoid, the loss of time was 167 times greater than in 1913. The results of anti-typhoid vaccination in the army give sufficient proof of its efficiency as a preventive measure to warrant its routine use in civil life.

The campaign against the plague, under the immediate direction of the United States Public Health Service, cooperating with the health boards of Louisiana and New Orleans, promises to eradicate the existing plague conditions and make the southern seaport rat free. The ordinances recently adopted for fighting the disease are far-reaching, there being more than three hundred men on the pay roll for carrying out the various provisions which contemplate the making of every available abiding place for man, beast and fowl effectively rodent proof. All plague carrying animals, their habitats, their sources of food supply and all infested harbors are being destroyed in the systematic fight now being waged against the plague.

The successful completion of the great undertaking in the canal zone, by which the year 1914 witnesses the commerce of the world passing unperturbed through the hitherto forbidden region of supposedly unconquerable disease, is distinctly a medical achievement unequaled by the accomplishments of any other body of men grappling with material things. Contrast this life-saving, health-giving, nation-building work of the medical man with the results of the unmeasured strength of the military of the nations of the earth, and then decide which is fighting the real battles for humanity. Through the effective work of the medical corps, the canal zone has come to be as disease free as are any of our home states. The prohibiting of the use of the canal by ships from infected ports will promote western-world sanitation by inducing disease-breeding countries to clean up and stay clean.

While your committee has no figures showing the extent of epidemic diseases in Indiana for the year

1913, it is evident that in spite of the commendable activity of the Health Service, too many deaths are still occurring from conquerable disease. This is particularly true of diphtheria. The delay in seeking medical treatment, and too often the desire of the physician to be certain of his diagnosis by waiting the result of the bacteriologic findings, are the two most frequent causes of the too-high death-rate. When it shall have come to pass that antitoxin shall be administered to every patient when the symptoms of diphtheria appear, and the bacteriologic examination shall be made afterward, there will be a notable lessening in the number of deaths from diphtheria.

EDWARD J. MCOSCAR, Chairman.

FRED W. TERFLINGER,

SHIRLEY C. LANG,

Committee on State Medicine.

REPORT OF COMMITTEE ON MEDICAL EDUCATION

House of Delegates, Indiana State Medical Association:

Gentlemen:—The subject of medical education, in spite of all that has been said and written concerning it, remains (and will remain) a topic of supreme importance. Not only is it concerned with the efficiency of the medical profession itself, but it has to do with the development of an intelligent laity capable of appreciating and making use of the beneficent agencies within its reach. Medical education therefore must take special cognizance of the preparatory training of the medical student, the special training of the medical student in the science and art of medicine, the development and maintenance of the highest possible efficiency in the medical practitioner by postgraduate study and practice, and the dissemination of knowledge among the laity as to the nature and management of abnormalities and disease, as well as to the possibilities and limitations of medical science.

With the constantly increasing number of subjects, and the great increase of material pertaining to each subject, the crowded course of study renders the problem of education more difficult to both student and teaching staff; and the increase of the premedical requirements adds not a little to the difficulty. There is danger, if certain present-day tendencies continue to exist and develop, that the medical profession of the future will become the product of state, or individual, endowed schools, and its personnel be drawn from a pensioned student body—the latter of which conditions is not wholly desirable, and is certainly not attractive to a nation of individualists.

The times demand a medical profession of broad culture and a fair degree of literary attainment and general education—a profession capable of participating actively and intelligently in all those affairs that go to make up the common weal, outside of the field of the management and cure of physical disability. Then, too, the times demand a medical profession the members of which are grounded in the principles of their art—not necessarily individuals of encyclopedic minds, versed in the lore and skilled in the art of every department of medicine—but men and women whose powers of perception and investigation have been so developed by competent training as to comprehend the variable phases presented by the organism “out of tune.” The attainment of these qualifications requires energy, intelligence and time—and so

much of the latter that there must be as little as possible of overlapping and repetition in the courses of study. Much thought has of late been devoted to this phase of education—well named “the waste in education”—and it is an omen of good that the educational leaders are devoting time and effort to devising ways and means of avoiding it.

The work of the Council on Medical Education of the American Medical Association is to be heartily commended, and your committee heartily recommends to the profession of Indiana the excellent report of that body, printed in *The Journal of the American Medical Association*, July 4, 1914, as well as the state board number of the same journal (May 23, 1914), and the valuable articles on medical education printed in the same journal of March 14, 1914.

The public, as well as the medical profession, of our state is to be congratulated upon the high standing and excellent work of our state medical school, and with the additional facilities recently rendered available, there soon will be ample opportunity afforded the members of our profession for high-grade postgraduate study.

With the correlation of the preparatory training, the maintenance and further development of the present high grade of medical education, and the provision for postgraduate work, our state will continue to hold its highly creditable standing. With a profession thus adequately trained, and alert to its opportunities and duties, the work of educating the public at large will go on as rapidly and effectually as is desirable.

W. F. HOWAT,

A. W. BRAYTON.

REPORT OF COMMITTEE ON TUBERCULOSIS

House of Delegates, Indiana State Medical Association.

Gentlemen:—Your committee on tuberculosis herewith presents its comments on the subject of tuberculosis as it pertains to the state of Indiana.

We are mindful of the fact that there has been much offered and done to stay the ravages of tuberculosis, but it is our purpose to offer some suggestions to aid in the work that is going on.

In our opinion the greatest need of the tuberculosis situation in the state of Indiana is provision for caring for far advanced cases. We are all enthusiastic about treating incipient and curable cases, but the far advanced case who infects members of his family and is one of the chief dangers in the spread of the disease through our community, is allowed to remain at home and keep on spreading infection. Some provision should be made for isolating the far advanced cases, and for caring for them properly as long as they require such care. The isolation of these cases should be compulsory.

In some homes an effective quarantine may be maintained without removing the patient to an institution. Where such provision cannot be made at home the community is under obligations to itself to provide a place which should not be too far away from the patient's place of residence and preferably in the same county.

Patients who are found to have tubercle bacilli in their sputum, and where the lung lesion shows that the disease may be still curable, should be compelled to take treatment and remain under treatment until well.

Treatment is always most effective in an institution, inasmuch as the number of patients who will take the cure faithfully at home and be careful of the disposal of their sputum is indeed few.

The campaign of education which has been and is being carried on is most commendable, and should be extended in every possible way so as to reach all the citizens in the different communities.

The state of Indiana should make its campaign against tuberculosis effective and thorough in every way. Half way measures are, of course, not useless; but if the control of tuberculosis in the state of Indiana is to be attained we must not be content with what has already been accomplished.

The State Tuberculosis Hospital, which has at present accommodations for one hundred patients, should be enlarged to at least three times its capacity and should be kept filled all the time. There are enough people in the state of Indiana, who right now are desperately in need of such treatment as the State Hospital can give, to fill an institution of a thousand beds.

The burden of taking the initiative and of doing the hardest work in the anti-tuberculosis fight falls on the physicians of the different communities. The effectiveness which must be attained in this fight requires that physicians be more alert than they have been in watching for signs of tuberculosis among their patients, and more careful than they have been in making examinations to detect disease in the lungs early. There are very few men who have not the skill necessary to make an accurate examination of the chest, and these cases which physicians have failed to detect have gone undetected more on account of lack of thoroughness in examination than lack of skill. The records of the State Tuberculosis Hospital show that among the incurable cases applying there for treatment a large number have not gone to the physician for advice or examination until the disease has progressed to the point when a cure was impossible. A certain proportion of these incurable cases have gotten into the hands of the physician early, and were either not examined at all until the disease had made considerable progress, or were so superficially examined that an accurate diagnosis was impossible. This state of affairs indicates the urgent need of education among the general public regarding the early symptoms of the disease, so that people will apply to the physician soon after the onset of symptoms. It also indicates that there is need for greater thoroughness and accuracy among the physicians throughout the state.

Your committee wishes to call your attention to the good work being done in our State Tuberculosis Hospital. Neither physicians nor laity of the state need be ashamed of their state institution, and from the standpoint of administration as well as the quality of medical work carried on, our institution at Rockville is equaled by few and surpassed by none.

In conclusion we wish to emphasize the importance of:

1. Strict enforcement of rigid sanitary laws.
2. Education of patient and public as to prevention of the spread of infection.
3. Authorities to take steps to increase the capacity for treatment and care of the incurables.

J. W. PHARES, Chairman.

E. A. STURM,

W. A. GECKLER.

REPORT OF COMMITTEE ON PATHOLOGY

House of Delegates, Indiana State Medical Association.

Gentlemen:—The Committee on Pathology begs leave to report as follows:

It is the opinion of the committee that heretofore there has been too little cooperation on the part of the members of the Indiana State Medical Association with the work of this committee. It has been the custom for the Association to expect the members of the committee to furnish, unaided, some form of exhibit or entertainment at the annual session. In order to make this of more general interest we would suggest that the Association appropriate a sum of \$200 yearly to be used for a general exhibit of pathologic specimens of all kinds which may be presented by members of the Association. To stimulate interest and to defray expense of presenting such specimens it is recommended that from this appropriation there be two prizes offered; first prize, \$50 for the best general exhibit by any individual exhibitor, and second prize, \$25 for the most unique specimen. The awarding of the prizes should be done by the members of the Committee on Pathology in conjunction with the president and secretary of the Association. The sum remaining shall be applied for the expenses of the exhibit, such as tables, cleaning, etc. It is further recommended that provision be made by the proper committee for the needed space and time for the exhibit.

(Signed) HENRY R. ALBURGER, Chairman.

GEO. W. McCASKEY.

REPORT OF COMMITTEE ON PREVENTION OF VENEREAL DISEASES

House of Delegates, Indiana State Medical Association.

Gentlemen:—Many divergent views are held as to proper and effective means of eradicating venereal diseases. There are those who believe the teaching of sex hygiene and the establishment of moral standards among the young are the only means of practical value.

There are those who believe that it is impractical to accomplish anything toward reducing the prevalence of venereal diseases by moral education, and who advocate administrative control of prostitution as most effective.

There are those who advocate temperance, early marriage and church affiliations as a solution of the problem.

Others believe this problem is only a minor one in the greater field of eugenics, and that every effort should be made to develop ideals of the purposes and unlimited possibilities of right use of the reproductive function and administrative restriction of marriage.

There are many others with different views, and among them those who will say that all this effort only results in rousing young men and women to a morbid curiosity which had better be left dormant.

It is not wholly a medical question, or a moral question, or an educational question, or a temperance, or a prostitute question. If progress is to be made in this cause of social betterment we must work along some one of the lines mentioned above.

The control of venereal diseases by means of regulation of prostitution has been attempted by many municipalities, and the degree of success obtained seems to have depended upon the vigor with which the

laws relating to the subject have been enforced, and upon the degree of support these laws received from the community.

While it rests with the police to rid our cities of habitual prostitutes and street solicitors, it rests with our churches and other moral agencies to build up a moral standard which will deter men from seeking the prostitutes.

It would seem that health departments were on a scientifically and morally sound basis in activity along the following lines:

Declaring syphilis and gonorrhea infectious, communicable and dangerous diseases.

Urging the enactment and enforcement of laws requiring physicians to report all cases of venereal disease.

The publication and popularization of trustworthy information about the prevalence and spread of these diseases.

In so far as possible the isolation and supervision of cases of venereal diseases just as other communicable diseases are controlled.

H. G. HAMER, Chairman,
WILLIAM P. GARSHWILER,
G. W. WARNER.

COMMITTEE ON CONSERVATION OF VISION

House of Delegates, Indiana State Medical Association:

Gentlemen:—An effort was made to have at least one lecture given in the county seat of each county in our state during the past year, but this could not be realized. In all, however, some fifty talks were delivered to something like five thousand persons. At the outset we found when we solicited the help of the general practitioner in carrying on this work in the smaller towns, that unless we could furnish him with a skeleton outline for his lecture he had neither the time nor the inclination to give it. Accordingly, it was deemed best to have five hundred reprints of such outline made, in which it was stated that in Indiana alone there are approximately twenty-five hundred blind persons of whom eight hundred have lost their sight through birth infection. What a burden this is to the state is at once apparent when it is known that the cost to the state is approximately forty-five hundred dollars during the school life of a blind child. Birth infection usually shows itself during the first week of the child's life and is easily recognized by the character of the discharge and the swollen condition of the child's eyes. It is the rule for one eye to be affected first and for the second eye to become subsequently infected through contagion carried by the infant's hands from the diseased to the well eye or through neglect or carelessness on the part of the nurse in not safeguarding the second eye. A similar disease is seen in the adult who perchance has contracted gonorrhea and either through ignorance or uncleanness carries the discharge to the eye. Since the poison which causes the eye inflammation is present in the discharge from the genital tract of the male or female, it is highly important that all dressings, towels or cloths contaminated by it be either burned or properly sterilized at once. Above all, the hands when contaminated by matter known to carry the poison should be most scrupulously washed and cleansed ere being brought into contact with a well

eye. The preventive value of Crede's nitrate of silver solution when used soon after birth, is recognized and employed in all parts of the world.

Trachoma or the red sore eyes is another disease widely distributed both in the rural districts and in our cities throughout our state. When one reflects that the time necessary to cure such a patient is anywhere from six months to four years, and that when permitted to reach the cicatricial stage it is not possible to bring about normal restoration of the eye, the economic loss to the individual and his family seems truly appalling. Because of its frequently insidious nature, the disease may be overlooked by the patient or lead him to neglect precaution in preventing its spread. Under certain conditions of crowding in ill-ventilated quarters found at times in schools, jails, orphan asylums and factories, the red sore eyes may assume epidemic proportions. The crowding of persons together, however, is only contributory to the spread of trachoma, since it is found in sparsely populated districts and in mountainous districts where habits of personal cleanliness are either unknown or not practiced. While the poison itself is not definitely known to the medical profession, yet it is definitely known that it thrives amid conditions of filth and that matter coming from an eye afflicted with trachoma when inoculated into the eye of another person is most apt to be followed by a like kind of inflammation. Prevention in this disease should be sought through personal hygiene and the use of separate wash basin and towel for the afflicted. The eyes of pupils in the schools should be examined by a competent eye specialist and those pupils excluded who are found with granular eyelid disease, at least during the suppurative stage.

The extent of blindness due to drinking wood alcohol is widely in evidence and stringent laws should be enacted and enforced for the prevention of adulteration of liquors with this substance. Not only is wood alcohol dangerous when taken by the mouth but it is equally so when the fumes are inhaled, a thing liable to happen among those engaged in the varnishing of beer-vats, since such varnishes frequently contain wood alcohol.

Industrial accidents we are all only too familiar with, and they constitute a frequent source of loss of one or both eyes. Safety devices should be employed more and more for prevention of such accidents, defective tools and imperfect machines discarded and adequate lighting provided for. The danger of infection of the eye is not alone through contamination by the foreign body, but likewise through attempted removal of the foreign body by means of unclean pocket knives or tooth picks. The safest means for the factory help to employ in removing such particles of steel or similar body is by means of a small particle of moist sterile absorbent cotton wound about a particle of wood and then by gently brushing across the eye you seek to entangle the foreign substance and remove it. An eye that has found lodgement for a foreign body that cannot be thus removed, had better be treated by an eye surgeon. Persons engaged in grinding should wear suitable protective goggles while for others who expose their eyes to intense heat and light, proper colored lenses are necessary.

Defective eyes may occur in the child during school life. The defect may be one of improper focus or be

occasioned through lack of development in that part of the brain concerned in seeing. Such children remain backward in their classes, yet at times much can be accomplished for them through adjustment of proper glasses. Faulty conditions in the school-room may, during the school life of a child who began his work with normal eyesight, lead to visual impairment.

As to the future of our conservation of vision work: in this you have the right to expect the active enlistment of every member who holds an interest in the eye and ear section, which you have so kindly permitted us to organize. There is pressing need for the continuation of these lectures, and much good will follow. I have found that the manufacturer is not only willing but offers every help to have his men instructed during the noon hour, and the men themselves have invariably, in my experience, been highly appreciative of our efforts to help them in the preservation of sight.

Respectfully submitted,

L. D. BROSE.

REPORT OF THE COMMITTEE ON CREDENTIALS

House of Delegates, Indiana State Medical Association.

Gentlemen:—At the West Baden session last year it was decided that the names of the delegates from the county societies should be sent to the Committee on Credentials soon after the delegates were elected, which in most counties is at a meeting in December. Up to the present but very few names have been sent in. It is hoped that the secretaries of the county societies that have not sent in the names of their delegates to the Lafayette session will do so at once, as it adds much to the pleasure and satisfaction of the House to have a full list of certified delegates when called to order at its first meeting. Confusion and delays are bound to occur if any considerable number of the county secretaries wait till the time of the session to do what should be done before.

ALLEN PIERSON, Chairman.

REPORT OF COMMITTEE ON NECROLOGY

House of Delegates, Indiana State Medical Association.

Gentlemen:—From Aug. 1, 1913, to July 31, 1914, seventy-two of the physicians of Indiana have passed away by death. Their names and date of death have been properly recorded in THE JOURNAL of the Indiana State Medical Association.

G. W. H. KEMPER,

Chairman of Committee of Necrology.

REPORT OF COMMITTEE ON MEDICAL DEFENSE

House of Delegates, Indiana State Medical Association.

Gentlemen:—It will be seen from the following report that the aid of the Defense Committee has been extended during the year to several members of the Indiana State Medical Association. The committee, acting under its instructions from the House of Delegates, has been obliged to decline to give its support to the defense of two members, against whom actions were brought for criminal malpractice. Although both of these members were promptly acquitted, the

committee believed that it could not, without exceeding its authority, defray any part of the expense for the defense of these cases. It will be observed that most of the cases concerned members of the Indiana State Medical Association practicing outside of the larger centers of population.

The committee desires to express again its appreciation of the earnest and intelligent services of its attorney, Mr. A. G. Cavins.

CASES REFERRED TO COMMITTEE

Dr. G. of English, and Dr. B. of Milltown, are being sued together. The committee is assisting financially, the actual conduct of the case being in the hands of an insurance company.

In the case of Dr. B. of Linton, our local counsel succeeded in getting the case dismissed by court proceeding.

Dr. B. of Vincennes, will be assisted in his defense.

Dr. C. of North Madison, suffered a judgment after a change of venue. His case is to be appealed. Counsel who tried the case feels it will not stand in the upper court.

Dr. D. of Bremen was sued in counterclaim to a suit by him for services. The matter was investigated by our counsel, and after hearing his report the committee doubted the propriety of its being called upon to make defense, there having been an offer of compromise to the doctor, which involved his receiving at least a portion of his charges, and the case presenting a fair field for a hard fight. The matter has not been closed, however, but the doctor was advised of the view of the committee.

Local counsel has been employed for Dr. G. of Fort Wayne, and the case is pending.

The case against Dr. H. of Indianapolis still drags along, though plaintiff's attorneys have been changed after a long delay.

Dr. L. of Valparaiso has been satisfactorily provided with assistance in his defense.

The case against Dr. McH. of Fort Wayne was tried, resulting in a hung jury, and is a very weak case.

In the case of Dr. M. of Summittville, the committee awaits advice as to how it can be of assistance. The doctor has counsel, through insurance.

A suit is pending against Drs. W. of Clay City, and T. of Hymera, at Sullivan. Steps are being taken in court to separate the defendants, and which will, we think, result in a dismissal.

The case against Dr. W. of Evansville, is pending, but is quite weak and possibly will never come to trial.

Instances occur in which applicants for assistance fail to accompany their applications with the proper copies of papers asked for, and sometimes correspondence is not promptly maintained. We ask all to co-operate with the committee by as full and careful attention to such details as is possible.

In accordance with the action of the 1913 session, the bond of the chairman is now on file in the sum of six thousand dollars.

The committee has held meetings, answered calls and letters, and co-operated with the counsel throughout the year. There has been recently, possibly owing to the court vacations, a very small number of suits filed; and it is to be hoped that they will drop off to a still greater extent.

FINANCIAL STATEMENT

Balance in fund, July 20, 1913.....\$3,130.35

The following amounts have been received from Dr. Stevenson, the Association's Treasurer:

| | |
|---|----------|
| Aug. 4, 1913..... | \$ 5.25 |
| Sept. 19, 1913..... | 16.50 |
| Oct. 9, 1913..... | 16.50 |
| Nov. 10, 1913..... | 9.75 |
| Jan. 5, 1914..... | 23.25 |
| Feb. 12, 1914..... | 1,560.00 |
| April 7, 1914..... | 108.00 |
| May 11, 1914..... | 45.75 |
| June 6, 1914..... | 14.25 |
| July 6, 1914..... | 142.50 |
| Aug. 14, 1914..... | 21.75 |
| Interest on savings deposit up to May 1, 1914 | 31.25 |

\$5,125.10

EXPENDITURES

| | |
|---|--------|
| Sept. 19, 1913—Waddell & Walterhouse for record book..... | \$.85 |
| Sept. 24, 1913—A. G. Cavins, two months salary | 60.00 |
| Oct. 6, 1913—A. G. Cavins, September salary—one day court work, trip to Linton and telephone message — Berns Case | 58.90 |
| Oct. 6, 1913—Oscar E. Bland—Berns Case | 50.00 |
| Nov. 20, 1913—A. G. Cavins—October salary | 30.00 |
| Nov. 20, 1913—Charles M. Niezer—McHugh case | 111.50 |
| Dec. 4, 1913—A. G. Cavins — November salary | 30.00 |
| Jan. 3, 1914—A. G. Cavins — December salary—trip to Ft. Wayne in Glock case—to Ft. Wayne, Bremen and Plymouth in Denison case—two and one-half days work in Glock and Denison cases | 110.00 |
| Jan. 19, 1914—Thomas J. Study—Schillinger case | 185.00 |
| Feb. 4, 1914—A. G. Cavins—January salary | 30.00 |
| Mar. 14, 1914—Chas. M. Niezer—Glock case.. | 50.00 |
| Mar. 14, 1914—A. G. Cavins—February salary | 30.00 |
| Mar. 20, 1914—Oscar E. Bland—Berns case.. | 50.00 |
| April 6, 1914—A. G. Cavins—March salary —trip to Sullivan and telephone message..... | 61.00 |
| April 21, 1914—Foster & Messick for bond.. | 13.50 |
| May 4, 1914—A. G. Cavins—April salary.. | 30.00 |
| June 1, 1914—A. G. Cavins—May salary.. | 30.00 |
| June 9, 1914—A. G. Cavins—trip to Sullivan in Ward & Thralls case—trip to North Vernon in Christie case—two days work | 50.00 |
| July 1, 1914—William Fitzgerald—Christie case | 100.00 |

July 1, 1914—A. G. Cavins—June salary. 30.00

Aug. 14, 1914—A. G. Cavins—July salary.. . . . 30.00

\$1,140.75

Balance in fund..... 3,984.35

\$5,125.10

The above report is complete up to Aug. 20, 1914.

JOSEPH RILUS EASTMAN, Chairman,

A. C. KIMBERLIN,

ALBERT E. STERNE,

Committee on Medical Defense.

A FORT WAYNE doctor is under arrest charged with manslaughter as a result of the death of two children operated on for "tonsils and adenoids" under H. M. C. anesthesia at the home of the children. The coroner says that the deaths were due to an overdose of the anesthesia, and the doctor says that the deaths were due to hemorrhage. It is generally conceded that the deaths were attended with the exhibition of carelessness if not ignorance, and yet we are disposed to believe that the conditions were not unlike those that prevail in many instances where operations of this sort are performed. The recklessness with which incompetent operators attempt surgical operations for which they are illy fitted by either education or experience is enough to call down the wrath of the public and the law on those who so wantonly trifle with human lives. The removal of "tonsils and adenoids" is not a simple operation if the work is done properly, and it is not an operation that should be entrusted to those who are unfamiliar with the work. It is a hospital operation first, last and all the time; and no surgeon of any experience would think of attempting to do the work under H. M. C. anesthesia, which is always dangerous and particularly so in children. Furthermore, it is the height of carelessness to operate these cases at a private house and then leave them in the hands of parents or other untrained nurses. Notwithstanding the fact that many men of little or no training in nose and throat work are attempting the removal of enlarged tonsils and adenoid tissue, we have no hesitancy in saying that the operation should be in the hands of specialists who are equipped by education and training to do the work. There is just as much reason for this belief as there is in the belief that major surgical operations of any character should be in the hands of a trained surgeon and not in the hands of a general physician. Operations are not without danger in any hands, but certainly less risk follows the operation and after care in the hands of those especially fitted and trained to do that kind of work.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 219 W. Wayne St., Fort Wayne, Ind.

SEPTEMBER 15, 1914

EDITORIALS

OUR PRESIDENT

Dr. John P. Salb, the president of the Indiana State Medical Association, was born in Weinsburg, Holmes County, Ohio, June 8, 1855. He is of German parentage, his parents having emigrated in 1850 and located at Weinsburg. In 1858 they came West and located at Jasper, Ind. There Dr. Salb attended the German parochial school until the age of 12 years, when he moved with his parents to a farm. In the fall of 1876 he read medicine in the office of Dr. O. A. Bingham of Jasper. In the spring of 1880 he graduated from the Indiana Medical College and located at Schnellville, where he practiced until 1885 when he decided to locate at Jasper, where he has been ever since. He has attended a number of special courses at the Chicago Polyclinic, and has always been interested in the work of the local and national medical societies, the meetings of which he has quite regularly attended. He has the record of having performed the first appendectomy in Dubois County in 1894.

He has built and owns his own surgical sanatorium and his work is confined principally to surgery. He has been president of the Dubois County Medical Society, vice-president of the Southern Railway Surgeon's Association, president of the Farmers' and Merchants' Bank of Jasper, and secretary of the Jasper Board of Health.

In every way Dr. Salb is a self-made man and is an example of what can be accomplished by industry, perseverance and integrity.

BLOOD-PRESSURE

The clinical study of blood-pressure is comparatively new, and yet within the last few years it has furnished a great amount of diagnostic, prognostic and therapeutic information. In the opinion of so eminent a physiologist as Ludwig, the discovery of blood-pressure was more important than that of the circulation of the blood. Certain it is that our increasing knowledge of

the subject shows that a blood-pressure apparatus is now as much a part of the physician's proper armamentarium as the clinical thermometer and the stethoscope, and the assistance that may be expected from its routine employment should be familiar to him.

Of instruments which have been devised for determining blood-pressure, there are many, though it is generally conceded that the mercury instrument is far more reliable, more accurate and more durable. In estimating blood-pressure the patient should be at rest, and when repeated readings are made the conditions should be as nearly the same as on previous examinations.

Norris, in his recent work on Blood-Pressure and Its Clinical Applications, says that the diastolic pressure is of more importance than the systolic pressure, inasmuch as it is a much less easily disturbed factor, but, on the other hand, he says that thousands of blood-pressure measurements on different individuals have shown that pressure relations are fairly constant under similar circumstances. He reminds us that blood-pressure readings furnish us with important and valuable data, but they must be interpreted in relation to other physical signs.

Goodman¹ gives some interesting facts concerning blood-pressure and its significance. He says that in normal young adults the systolic blood-pressure is from 120 to 130 mm. mercury, and that pressures below 120 or above 140 mm. mercury should be considered as abnormal. Females as a rule have a somewhat lower pressure than males, but this is insignificant. There is rarely a difference in pressure in the two arms. Blood-pressure increases with age, weight and size. It is slightly increased after eating or drinking and returns to normal within two or three hours. There is also a rise of pressure after exercise and during nervous excitement. Alcohol has been found to have no more influence in raising blood-pressure than the ingestion of an equal amount of any irritant. When there is a change in pressure from alcohol ingestion it is usually in the direction of a fall and not a rise. In chronic alcoholics hypertension is frequently seen, but this must be ascribed to arterial degeneration secondary to the toxic action of alcohol. On the other hand, tobacco has a decided influence on blood-pressure due to the absorption of some toxic agent. The rise in blood-pressure is gradual, increases regularly until a rise of 10 to 30 mm. mercury has been established, and is greatest when strong tobacco is used and at the time when the smoker feels a sensation of definite

¹ Blood-Pressure in Medicine and Surgery, Lea & Febiger, 1914.

intoxication. The hypertension lasts from one to two hours after smoking, so that a smoker has constantly an abnormally high pressure. Exercise, when prolonged or violent causes a diminution of pressure, but when it is moderate the pressure is always raised.

Despite the fact that a rise in pressure in individuals past 50 years of age is generally supposed to be physiologic, Goodman says that the systolic blood-pressure is never above 150 mm. mercury in health, and that permanent high blood-pressure (above 160 mm. mercury) is met with in but two groups of cases, the one may be called simple hypertension and the other is nephritis. Furthermore, he makes the emphatic statement that "whenever a pressure above 150 mm. is encountered, no matter what the age of the patient, chronic nephritis should be suspected and every means at our disposal should be enlisted before the case is classed as simple hypertension." Norris also substantiates this statement when he says: "A systolic pressure constantly above 160 mm., or a diastolic pressure above 100 mm. Hg., is definitely pathologic at any age. The younger the subject with such a pressure the more abnormal must it be considered. Before middle life 145 mm. should not be exceeded." Inasmuch as the diastolic pressure is far less subject to temporary variation, Norris makes the further statement that a constant diastolic pressure of or above 100 mm. indicates hypertension regardless of whether the systolic pressure be 180 or 140 mm.

In this connection Fischer's² figures may be quoted, which show that of 550 patients with permanent blood-pressure above 140 mm. mercury, 62.5 per cent. had *definite* signs of nephritis, 14.5 per cent. had a *probable* nephritis, and in 23 per cent. the examination was negative. Of 300 cases with blood-pressure above 160 mm. mercury, 80 per cent. showed *definite* signs of renal disease; in 16.3 per cent. nephritis was probably present, and in but 3.6 per cent. there was no reason for suspecting any kidney insufficiency. Of the 300 cases, 46 came to autopsy, and in all there was a definite and advanced disease of the kidneys. This leads Goodman to say that "such statistics substantiate the belief that pressures above normal should be regarded most seriously, not prognostically gravely, but diagnostically seriously, as nephritis is, in the vast majority of cases, the cause of hypertension despite negative urinary findings."

In cases of simple hypertension there must be no clinical or anatomical evidence of a nephritis

or of an arteriosclerotic process. High blood-pressure, however, is always a serious phenomenon. The work of the heart is seriously augmented when blood-pressure has been high for any length of time, and as a result cardiac hypertrophy is the earliest and most constant manifestation. Subjectively, there may be but few symptoms, but sooner or later they appear, at first insidiously, as headache, cardiac palpitation, dizziness, gastric distress and nervousness. Finally, more pronounced disturbances, such as apoplexy, retinal hemorrhage, blindness, angina pectoris and acute pulmonary edema make their appearance. A great many clinicians regard hypertension as a latent form of chronic hypertensive nephritis, a nephritis without albumen and casts. It is also considered that albumen and casts are sometimes a very late sign of a long-standing nephritis.

In considering hypertension associated with arteriosclerosis, it must be debated whether arteriosclerosis is a cause of high blood-pressure, or if high blood-pressure is a cause of the arterial degeneration. A late view of the situation is that arteriosclerosis causes the nephritis which in turn is the principal cause of the hypertension. This does not contradict the evidence obtained in those cases of arteriosclerosis who have had during their life-time high blood-pressure, but who exhibit no pathologic changes of the kidney at autopsy. Sawada, following an examination of 206 cases of arteriosclerosis, found that only 12.3 per cent. showed a slight increase of pressure, thus indicating that arteriosclerosis alone cannot account for hypertension. He believes that "*blood-pressure above 160 to 170 mm. mercury point definitely to an interstitial nephritis*, even when there is no albuminuria and no cylindruria." These conclusions are endorsed by other clinicians who have made routine blood-pressure examinations in cases of marked arteriosclerosis and found no marked increase in the blood-pressure.

Edwards³ emphasizes the significance of hypertension in connection with kidney lesions by saying that high blood-pressure is the earliest and most easily recognized feature of interstitial nephritis and is a much more constant sign than the urinary findings. This view is held also by Dieulafoy,⁴ Herrick,⁵ Kelly⁶ and others. It is not at all unusual to find urine negative as to albumen and casts, but hypertension is rarely absent. Persistent hypertension is, therefore, to

3. Edwards: Text-Book of Medicine, 1909.

4. Dieulafoy: Text-Book of Medicine, 1911.

5. Herrick: Osler's Modern Medicine, 1909.

6. Kelly: Practice of Medicine, 1910.

2. Schlayer in Münch. med. Woch., 1913, p. 63.

be regarded always as a manifestation of nephritis, and this view must be uppermost in the examiner's mind until he can prove that in a particular case no nephritis is present. This is emphasized by Jancway⁷ who found only 10 per cent. of hypertension cases occurring independently of nephritis in 100 patients dying with hypertension.

Inasmuch as pressures above 150 mm. mercury generally spells nephritis, insurance examiners should regard such pressures with suspicion. A well-known insurance company has furnished statistics which show the wisdom of this statement, for, of 365 cases rejected on account of high pressure alone (170 mm. mercury), 136, or 35 per cent., later proved to be suffering with various serious ailments, any one of which would have provided a basis for rejection. Concerning the importance of blood-pressure examinations in life insurance examinations, Norris unhesitatingly says that in the vast majority of cases a systolic blood-pressure of over 160 mm. and diastolic pressure of over 100 mm., if constantly present, points indubitably to that symptom complex that is designated as interstitial nephritis. The degree of tension which can be borne without subjective consciousness is mainly an individual question, but a pressure of 180 mm. is not often exceeded without symptoms, and constant pressures of 200 mm. or over are generally not long maintained before leading to some sudden catastrophe such as angina pectoris, uremia, or apoplexy.

A lowered blood-pressure, or hypotension, is by some authorities believed to be of value in differentiating tuberculosis in dubious cases, and some French clinicians go so far as to say that hypotension is an incipient sign of tuberculosis, irrespective of the pulmonary and other clinical findings.

Concerning the therapeutic measures to be employed in the treatment of blood-pressure, it may not be out of place to say that the iodids, which are so frequently prescribed, have little effect in hypertension when the latter is due to nephritis as is so often the case. Even in arteriosclerosis the good effects that are sometimes seen may be due to the action on an underlying infection (syphilis) and not to any action on the arteriosclerosis process itself. Sodium nitrite reduces blood-pressure more rapidly than the more complex compounds, but none of the nitrite group is efficient for maintaining a pressure at a permanently lowered level, as a tolerance is

soon acquired. If the dose be still further increased unpleasant symptoms result.

The general principles concerning diet in hypertension may be summed up as follows: First, spiceless food; second, lessening of the meat intake; third, increase of vegetable diet; fourth, lessening of fluid intake; fifth, lessening of salt intake; sixth lessening or even cessation of alcohol. While alcohol has little action on blood-pressure, secondarily it has a pernicious effect on the blood-vessels, leading to arterial degeneration, and for this reason temperance is advisable in blood-pressure cases. Consumption of tobacco should be gradually lessened and eventually stopped altogether. Elimination should be increased. This may be accomplished by sweat-baths and free purgation. Drugs are of less value than diet, free purgation and hygiene. When the heart begins to falter, the patient should be put to bed and placed on a more rigid regimen.

The recognition of the significance of blood-pressure and the necessity for estimating it is important for every clinician who desires to adopt all known measures that are required for the proper diagnosis, prognosis and treatment of diseases. If Goodman, Norris and others who have carefully studied the subject of blood-pressure have presented nothing else of value, their dictum that a persistent systolic blood-pressure in excess of 150 mm. of mercury is significant of existing or probable nephritis is worthy of serious consideration.

MALARIA IN INDIANA

In this number of *THE JOURNAL* we publish an interesting paper concerning the prevalence of malaria in a certain part of Indiana. That malaria exists in Indiana to a greater extent than generally supposed would seem established by the fact that the disease is not infrequently found when it is looked for in the right way. On the other hand, it is quite the practice of some physicians to tell patients that they are suffering from malaria, without having gone to the trouble to examine the patient's blood to determine the presence of the plasmodia. To call the case malaria because nothing else has been found as a cause for the trouble is not in keeping with careful and intelligent clinical examinations; for, as pointed out by Dr. Marshall, the diagnosis must rest on the discovery of the plasmodia in the blood.

That malaria is destined to be more common in various parts of the country is evidenced by the report from our troops in Mexico to the effect

7. Amer. Jour. Med. Sciences, 1906, cxxxI, p. 772.

that at Vera Cruz malaria comes second after dysentery in its importance. The greatest number of infections are tertian, yet both quartan and estivo-autumnal types have occurred. A systematic effort has been made to destroy the breeding-places of the mosquito, and the results have been well worth the trouble and large expense, since mosquitoes of all kinds have been practically absent from Vera Cruz during the past few weeks. The men who are on guard at the outskirts of the sanitary zone suffer the most from mosquito bites and furnish the largest number of victims of malaria. The antimalarial campaign includes, besides the measures against mosquitoes, the daily prophylactic use of 3 grains of quinin to each man, the screening of buildings and the use of bed-nets. Despite the effort to stamp out malaria at Vera Cruz, no inconsiderable number of soldiers who have been infected with malaria will return to the United States where they may, if not properly cared for, aid in the spread of the disease.

In those communities where malaria is definitely known to exist, it devolves on the health department to get busy in inspecting houses, cisterns, cess-pools, courtyards and all low or marshy places which are breeding-places of mosquitoes, and to employ freely a liberal quantity of coal oil.

LOCAL PREPARATION OF PATIENTS FOR OPERATION

Whiting, in an article in *The Journal of the A. M. A.*, August 8, on "The Local Preparation of Patients for Operation," says that as a result of experience and experimentation the chemical sterilization of the skin is being limited more and more to the use of alcohol in from 60 per cent. to 80 per cent. strength, and solutions of mercuric chlorid, of biniodid of mercury, of iodine (with or without the addition of potassium iodid) and of thymol. He quotes Post and Nicoll concerning the ineffectiveness of watery solutions of mercuric chlorid if prompt disinfection is required and commends acidulated alcoholic solutions of mercuric chlorid as being more efficient and markedly so when used on a dry skin. The objection to this solution is that it is painfully irritating to the skin. Chemically pure alcohol has no germicidal power, though it is shown that alcoholic solutions are more efficient when made with 70 per cent. alcohol than with 95 per cent. However, in preparing the skin for operation the author follows the lead of others in recommending iodine as the chemical which places the skin

of the field of operation in the realm of ideal asepsis. The parts should be shaved dry and painted with a 10 or 12 per cent. solution of iodine in alcohol. The skin must be dry when the iodine is applied, for the presence of water macerates the epidermal cells and causes them to swell, thus plugging up cracks, crevices and openings in the skin. Iodine applied to wet skins has a tendency to cause suppuration and blistering. Whiting adds that aqueous solutions of iodine are less efficient than alcoholic, and that solutions made with 70 per cent. alcohol have greater germicidal power than 95 per cent. Furthermore, the addition of potassium iodid makes the solution much more stable and enhances the germicidal value. The official tincture of iodine, containing 7 per cent. iodine and 5 per cent. potassium iodid in 95 per cent. alcohol is increased in germicidal power by diluting with one part water to four parts tincture. The mechanical cleansing with soap and water and aqueous antiseptic solutions aims to remove great numbers of bacteria and debris, though it is questionable if it doesn't remove too many cells and make the skin more susceptible to infection. The dry method with iodine as the sterilizing agent seems to have more adherents, and carefully conducted experiments seem to indicate that it is more efficacious in producing asepsis.

EDITORIAL NOTES

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better *Journal* for you.

THE PLACE, LaFayette.

THE TIME, Wednesday, Thursday and Friday, September 23, 24 and 25.

THE ATTRACTION, the annual session of the Indiana State Medical Association.

WHILE you are glancing over the advertising pages of THE JOURNAL do not forget to read the commercial announcements. If you want to buy or sell something, use the commercial announcements on the third cover page.

DON'T forget that the medical profession of LaFayette boasts of having one of the finest hospitals in the state. Surgeons and others who are interested in hospital construction and management should take advantage of the opportunity to visit this model institution.

Don't forget your membership card when starting for LaFayette. Registration will be by card according to the provision of the By-Laws of the Association.

THE Committee on Arrangements for the LaFayette session has requested us to urge the members to bring their wives and sweethearts. Special entertainment has been arranged for the visiting ladies by the wives of the LaFayette physicians.

MEMBERS of the House of Delegates should remember that they must have credentials, and such credentials should be in the hands of the Chairman of the Committee on Credentials, Dr. Allen Pierson, Spenceer, Ind., prior to the LaFayette session.

ONCE more let us announce that we shall be pleased to supply missing numbers to complete THE JOURNAL files of any members of the Association provided we are notified promptly when any number of THE JOURNAL fails to appear by the end of the month of publication.

THE Committee on Pathology has a very valuable suggestion which we hope will be adopted by the House of Delegates, namely, the awarding of prizes for the best general pathologic exhibit as well as the best individual exhibit of pathological specimens at our annual sessions. The pathologic exhibit should be one of the most instructive and valuable features of our Association sessions, and the House of Delegates will do well to encourage it.

THE smoker to be given by the Tippecanoe County Medical Society as a part of the entertainment of visitors to the LaFayette session, is going to be a social feature which no member of the Association should miss. It is the one general entertainment where the doctors can all meet together for the renewal of old and the forming of new friendships. The smoker will be given at the Lincoln Club on Wednesday evening, September 23.

THE Committee on Public Policy and Legislation of the Association has little to report in view of the fact that the legislature was not in session last year. However, the chairman of the committee calls attention to the fact that the coming legislature will be an important one in view of considerable proposed legislation which

will affect the medical profession. Therefore, medical men should be on the alert to protect their interests, and the cooperation with and the support of the Committee on Public Policy and Legislation is solicited.

DR. U. B. G. EWING of Richmond has an article in the *Evening Item* of Richmond, in which he says that the Chautauqua Salute is as dangerous as a cup of unlabeled poison. His view is that the handkerchief is laden with germs which are distributed through the air when Chautauquans offer it as a silent tribute of welcome. The suggestion that some other form of salute should be adopted is worth the serious consideration of Chautauquans.

IN this number we print the completed program for the LaFayette Session. The scientific meetings offer an excellent list of papers on live subjects. We suggest a careful preparation on the part of those who are appointed to open discussions of papers, and a careful perusal of the abstracts may stimulate preparation of discussions by others. The local profession has made ample provision for social entertainment, and with all, the entire session should prove as interesting and profitable as any that have gone before.

THE medical and surgical departments of the European armies are going to play a leading part in the war that is now going on. The efficacy of many sanitary and health preserving measures will be tested to the limit, and we feel satisfied that at the completion of the war, and the history of the same has been written, the people of all nations will have greater respect for the opinions of the regular medical profession and a keener recognition of the value of the humanitarian work that receives the constant and increasing attention of the medical profession.

ANY member of the House of Delegates ought to be ashamed of himself if he asks that one or more committee reports be read in full at any of the meetings of the House of Delegates. The reports are published in this number of THE JOURNAL, and reprints of all of the reports will be distributed at LaFayette. It is not only the privilege but the duty of every member of the House of Delegates to read these reports carefully for the express purpose of acquainting himself with their contents so that he can act

intelligently on them at the proper time. These reports are printed in advance so that the necessity for reading them at any of the meetings may be avoided.

WE desire to emphasize the importance of carefully editing all manuscripts and discussions that are to be presented at LaFayette. The editor of *THE JOURNAL* will be saved a great deal of work if this suggestion is followed. Not one physician out of a hundred who submits manuscripts for publication will be satisfied to have that manuscript published just as it is submitted. On the other hand, there are few who could not make their manuscripts presentable for publication without alterations and corrections if a little time is taken for editing with a view to eliminating iteration and reiteration, errors in construction of sentences, punctuation, capitalization, paragraphing, etc. Furthermore, it should be understood that all manuscripts must be typewritten to conform to the rules of the printers.

THERE are many reasons why our sections should have permanent secretaries. Let us get away from the idea that all of the offices of our Association are honors that should be distributed around. The duties of any secretary are burdensome and the work difficult except for those who are energetic and enterprising. It takes a real "live wire" to be a successful secretary of anything, for, as we have often said, the secretary can either make or break any organization. The success of the sections of our Association depend in a very large measure on the activity and resourcefulness of the secretaries. To elect Tom, Dick or Harry as secretaries of sections is a suicidal policy. Let us select energetic and progressive men as secretaries and then keep them in office. In no other way can we expect to have good programs, with a systematic and well-arranged carrying out of the work entailed in making the section meetings successful.

THE committee reports are published in this number of *THE JOURNAL*. It is the duty of every member of the House of Delegates to read these reports before going to LaFayette. The object in printing the reports in advance is for the purpose of giving the delegates an opportunity of reading and digesting the reports prior to action on them. Furthermore, according to a rule adopted by the Association, the reading of the reports is dispensed with in consequence of

the prior publication of the reports, and this saves a great deal of time which otherwise would be taken from the scientific meetings. There is absolutely no reason why a member of the House of Delegates should not be familiar with the reports on which he is asked to pass judgment by his vote, and he hinders the wheels of progress by asking that time be consumed for the reading of a report because he has been careless or negligent in failing to read it prior to the LaFayette Session.

THE McClure publications have gained considerable prominence through the publication of articles recommending the morphia and scopolamin treatment in obstetrical cases as carried out at a small hospital in Freiburg, Germany. From the fact that the readers of the McClure publications are led to believe that nowhere outside of Freiburg can the treatment be successfully administered, one would naturally infer that Professor Krönig of Freiburg was responsible for the nice bit of advertising that he is receiving. However, the fact remains that a very large number of very competent clinicians pronounce morphia and scopolamin treatments in obstetrics positively dangerous and the public deserves to know the facts. Aside from all this, it is unfortunate that lay publications will print articles of a medical and surgical nature which do not represent the consensus of opinion of the medical profession or that have not the approval of a publication committee of some reputable medical organization.

As usual, we have had a great deal of difficulty in securing the cooperation of essayists and members of committees in preparing copy for this number of *THE JOURNAL* which contains the scientific program and all announcements concerning the LaFayette Session of the Association. It is not that doctors are so infernally busy that they cannot fulfil their obligations, but they procrastinate through sheer force of habit. Each year we write from one to three letters to each man who is expected to send in a committee report or an abstract of his paper for the scientific program, and usually before we go to press we are compelled to send several telegrams for the purpose of hurrying belated reports. The experience leads us to suggest that doctors will receive a merited and greater amount of confidence and respect from everybody, patients included, if they would pay a little more attention to promptness in fulfilling obligations.

It is this careless and indifferent manner which gives to doctors the credit of being poor business men.

FRIEDMANN and his remedy have fallen into justly merited disrepute. The remedy at first could not be obtained in Germany for individual control research and the unfavorable reports which came from America further contributed to postpone the verdict of the German profession on the remedy, but when they were able to investigate it, the conclusions were almost unanimously negative. Brauer, in the *Beiträge zur Klinik der Tuberkulose*, Würzburg, says that "it is to be hoped in the interest of the tranquil and steady development of German medical science and the health and peace of mind of the sick that the sensational agitation over the Friedmann tuberculosis treatment will disappear from scientific journals, and, above all, from the newspapers." In view of the denunciatory verdict which is almost unanimous, it is surprising that such a prominent journal as the *Deutsch medizinische Wochenschrift*, Berlin, will give space to an article from Friedmann on the indications for his treatment of tuberculosis, as it did in the number issued June 18. It is time to give Friedmann and his remedy an enforced rest.

IF any of our members are in doubt as to the value of the medical defense feature of the Association they should read the report of the Committee on Medical Defense published in this number of THE JOURNAL. It will be seen that quite a large number of the members of the Association have been assisted in their defense of malpractice suits, and except in those cases where action is still pending, the efforts have been entirely successful. When it is considered that this feature costs each member of the Association but 75 cents per year it can be understood how wise the Association was in offering that feature as one of the advantages of membership in the Association. An interesting phase of the situation is that the Committee on Medical Defense now has a fund of over \$3,000 in the treasury, and according to the provision under which the medical defense feature was adopted, when the medical defense fund reaches \$6,000, anything over that amount is to revert to the general treasury. Incidentally, the Association owes a debt of gratitude to the members of the Medical Defense Committee who have worked so zealously in the interest of the Association, and no small amount of credit should go to Mr. Cavins, attorney for the committee.

SINCE publication of New and Nonofficial Remedies, 1914, and of the supplement to New and Nonofficial Remedies, 1914 (July 1, 1914), the following articles have been accepted for inclusion with "N. N. R.":

Fougera and Co.:

Electrargol for Injection, 10 c.c. ampules.

H. K. Mulford Co.:

Hypodermic Tablets of Emetine Hydrochloride.

Waukesha Health Products Co.:

Hepeco Flour.

Hepeco Dodgers.

Hepeco Grits.

E. Fougera and Co.:

Electrargol.

At the request of the manufacturer—Comar and Co., Paris—the Council has recognized E. Fougera and Co., New York, as the American selling agents for the product. Also in view of information received from Comar and Co., it has modified the New and Nonofficial Remedies description for Electrargol to indicate that this product now contains the equivalent of 0.4 per cent. of metallic silver.

THE House of Delegates will have little trouble in disposing of the committee reports as published in this number of THE JOURNAL. We are much pleased to note that the President has failed to appoint some committees that up to this year were regular features, though useless. With perfect propriety the list of committees could be reduced still further in number. It is a waste of time for the House of Delegates to consider some committee reports which mean nothing, and from which absolutely no good can come. From actual knowledge of the facts, the editor of THE JOURNAL can testify that some of the committees have done no work and given no thought to the subjects they discuss until called on for a report for publication in THE JOURNAL. Then a hastily prepared, and sometimes meaningless report is furnished, which is a perfunctory affair and accomplishes nothing. There are some committees that are vital to the best interests of the Association and to the cause that is represented by the medical profession. These committees should be strengthened in every possible way and made a power for good. The useless figure-head committees should be dropped, and the time of the Association, and in particular the House of Delegates, saved from considering reports which have no practical value.

THE Nebraska State Medical Association has taken a positive stand on the question of fee-splitting and has directed its council, through a standing committee created for the purpose, to institute an investigation whenever a member is accused of this practice. The council has defined the term "fee-splitting" as follows:

"In order that there may be no misconception . . . the Board of Councilors hereby specifies that where a patient is referred by one physician to another, neither one shall handle or transmit any part of the patient's funds which is to go to the other. Each physician must render a separate account for his services as operator, counselor, companion, anesthetist or assistant, and neither physician shall in any such case collect or transmit any part of the other's fee. Failure to observe this rule shall be considered prima facie evidence of fraud. The board realizes that in making this interpretation of the resolution it will prevent a number of perfectly innocent transactions; but it feels that such interpretation is necessary to prevent fraud in the guise of innocence. It is not meant by this, however, to prevent a surgeon or specialist from including in his bill the accounts of his ordinary assistants, provided that they are not concerned in the reference of the case in question. Nor shall it be held to prevent any physician from collecting the fee for Roentgen ray or other laboratory work done for him by another, provided that the amount of such collections be specified in the bill."—*Jour. A. M. A.*, Aug. 8, 1914.

SOME of the Indiana newspapers are publishing a lengthy article from the pen of a French physician who attempts to show that a large number of physicians, and especially surgeons, are opposed to vivisection, because animal experimentation has brought about no beneficial results. What surprises us is that newspapers will print lengthy communications on some important subject without making an effort to determine whether the writer of the article is worthy of respect and confidence or whether the principles involved in the contribution are worthy of dissemination among the laity. It is comparatively easy to determine the standing of any medical man who seeks the limelight of publicity, as it is also easy to determine whether the overwhelming majority of the members of the medical profession are upholding certain practices. Vivisection as practiced to-day by all leading institutions is conducted under strict rules concerning the avoidance of suffering by the animals that are used for experimental purposes, and it has been definitely established that the results secured through vivisection have been of inestimable value to the human race. Vivisection has the endorsement of all prominent and progressive physicians, and it is a misrepresentation for any newspaper to say that a majority

of the leading medical men to-day are opposed to vivisection because it has accomplished no good for humanity.

THE state of Iowa is going to fight fake medicine cures and quackery. The fight will not be carried on through the courts. It will not be taken before the legislature for additional legislation.

Through the Board of Health, the state is going before the thousands of people who visit the state fair this year and call a spade a spade. Medicines and cures that have been branded by the American Medical Association as fakes will be named. Their advertisements will be exhibited. Their results will be pictured. Their effects on the life and health of their users will also be told.

The women's building at the state fair will be "plastered" with great placards denouncing various cures. Every woman who enters the building cannot help but see them. One placard in particular will show the testimonials of four persons. The testimonials declare the writers thereof were cured of consumption by various "cures." Right below the testimonials will appear the obituaries of the four and their cause of death, tuberculosis. Clippings from newspapers showing deaths from various kinds of headache powders and "wonderful cures" will be reproduced on other placards.

It is the first time, according to Dr. Sumner, that the state of Iowa has campaigned against fake medicines and quackery. Some of the placards have already been printed and received.—Des Moines (Iowa) *Capital*.

ONE of the prominent members of the Indiana State Medical Association, in commenting on the work at our annual sessions, writes us as follows:

"I wish that someone would start a movement to do away with the Friday morning meeting of the House of Delegates which kills everything else for Friday forenoon. Why not have the last meeting of the House of Delegates occur the first thing Friday afternoon? As it is now, Thursday morning is a handshaking affair; Thursday afternoon we do some work; Friday forenoon everybody is absorbed in the election and in the doings of the House of Delegates, and Friday afternoon there is a grand scramble to get home. I believe that we should provide some means to save Friday forenoon for uninterrupted scientific work."

We are in sympathy with the suggestion that has been made. The manner in which we tread on the time for our scientific meetings by arrang-

ing for meetings for the House of Delegates or social entertainment is very discouraging to the doctor who goes to our Association sessions with a view to getting some real profit from attendance. The present arrangement practically leaves but one afternoon for real work and the possibility of securing uninterrupted attention from all members. At present the constitution and by-laws fixes the time for the final meeting of the House of Delegates, but it would be far better if we could change this time, either through alteration in the constitution and by-laws or by lengthening our session to three days as heretofore. As conducted at present our annual sessions are devoted too largely to business, politics and social entertainment, with resulting interference with, if not suppression of, actual scientific work. Some change is worthy of adoption.

It would be a good thing if our state and county boards of health devoted a little attention to a sanitary survey of the numerous lake resorts that are found in Northern Indiana. It is quite possible that out of several hundred lakes there is not one which is not in a measure a resort patronized by numerous summer visitors, and not a few have shores that are occupied by hotels and cottages, in many instances packed in like sardines. Few of these resorts possess a semblance of proper sanitation, and in consequence, typhoid cases not infrequently are traced to them. In all probability the majority of cottagers would be willing and even anxious to correct bad sanitary conditions if boards of health would point out the necessity for such action, and perhaps afford suggestions for improvement. At some of the resorts no effort is made to inaugurate the slightest semblance of regulations to improve sanitation, and the wonder is that from such sources there is derived no more sickness than is reported. There are, however, proofs which indicate that every fall a certain number of typhoid cases develop as a direct result of vacations spent at some of these Northern Indiana resorts. This could be checked if health boards will do their duty by looking after the sanitation at the resorts in question. The average health officer is more interested in drawing his salary than in looking after any of the duties of his office, and considering the small salary that is paid most of the health officers, but little criticism can be offered if they are a little apathetic. Yet in defence of the general proposition that health affairs should receive the consideration that they deserve we must say that the doctor who accepts a position as health officer should be willing to give the duties of the office his earnest and conscientious attention. The Northern Indiana lake resorts

need supervision of their sanitary conditions, and it is the duty of the health officers to give the matter attention.

IN last month's number of *THE JOURNAL* we published an editorial note concerning the false warning of opticians that was being sent out by a prominent optical firm. Since then we have received numerous letters from physicians making inquiry as to the name of the firm that is guilty of sending out such false warnings as referred to in our editorial note, and volunteering to withdraw their patronage from such firm if it was found that the writers were patronizing it. One of our readers took the trouble to write the firm concerning the matter, and we have permission to reproduce the letter, together with the answer, which are as follows:

LA FAYETTE, IND., July 16, 1914.

*The Standard Optical Co.,
Geneva, N. Y.*

Dear Sirs: I received to-day your current number of the *Stoco News* with enclosures, one of which surprises me very much. It is headed "Poison, Beware! Do not allow anyone to put drops or drugs in your eyes!" etc., and encloses a card with a picture thereon. It quotes an eminent medical authority but does not mention his name.

This is an insult to the oculists of this country, a great number of whom probably are patrons of your house either directly or indirectly. Why do you put out this lying stuff? Are the ophthalmologists criminal? Hardly. We are not out to damage the eyes of our patients but rather to benefit them.

I trust that the like may not be foisted on the ophthalmologists of the country again by your journal.

Very truly,

GEORGE F. KEIPER.

To the above the following answer was received:

GENEVA, N. Y., Aug. 4, 1914.

Mr. George F. Keiper, Lafayette, Ind.

Dear Sir: Referring to your favor of the 16th, beg to advise you will have no further cause for complaint as per the subject of your letter.

Regretting the circumstance, we are

Very truly yours,

THE STANDARD OPTICAL CO.,
_____, Sales Manager.

AGAIN we desire to comment on the practice of certain members of the medical profession who purchase cheap and inferior drugs and surgical instruments from irresponsible manufacturing pharmacists or wholesale druggists. If there is any one place where quality is essential it is in the drugs and chemicals that are used in the treatment of the sick. It does not speak well for the medical profession to be guilty of the purchase of drugs that are below standard. There

are certain manufacturers whose names are synonymous with quality. Very naturally their prices are somewhat higher than the prices charged by firms turning out inferior drugs, but there is an old saying that the best is always the cheapest, and we might add that, generally speaking, one gets what he pays for. If a drug, pharmaceutical preparation or instrument is cheap, there is a reason for it, and that reason is generally inferior quality or short weight. The editor of *THE JOURNAL* has refused the advertising of some firms that are notorious for the unreliability of the products they place on the market, yet some of these firms boast that they are selling their products to some of our well-known physicians. *THE JOURNAL* has made an endeavor to protect its readers in every sense and is doing so at a direct financial loss if profit is the only thing to be considered. What incentive is there for us to maintain a high standard unless we receive the unanimous support of the profession? We carry clean, ethical advertising of reputable and responsible firms. We believe that these advertisers should be patronized in preference to the unethical and disreputable firms that turn out products that are of inferior quality and under misrepresentation. Will the members of the medical profession, individually or collectively, continue to maintain the reputation they now bear of being the biggest "dupes" of any class of people? We are using every endeavor to live up to what we preach, and we hope that our efforts to encourage the rank and file of the medical profession to right thinking and right acting will bring about some satisfactory results.

DEATHS

C. L. DICKENS, M.D., of LaFontaine, died August 19 of heart disease; aged 58 years.

W. G. RALSTON, M.D., a physician of the old school, died at his home in Evansville August 11, aged 96 years.

JOSEPH A. UTTER, M.D., of Crawfordsville, died very suddenly August 19 from heart trouble; aged 67 years.

ENOCH W. KEEGAN, M.D., died at his home in Crawfordsville August 29, following an attack of apoplexy; aged 78 years.

LEONIDAS L. MANN, M.D. (retired for the past eighteen years), of Richmond, died August 9 of uremic poisoning; aged 67 years.

L. O. CARSON, M.D., died August 21 at his home in Indianapolis, aged 63 years. Death was due to tuberculosis and kidney trouble. He was a member of the Indiana State Medical Association.

L. T. WHALEY, M.D., of Winslow, was burned to death August 13, when his automobile turned over into a ditch, pinning both him and another occupant beneath it and catching fire before aid could reach them. Dr. Whaley was 25 years of age.

ROLAND T. BLOUNT, M.D., of Rushville, died August 28 at the Robert W. Long Hospital, Indianapolis, following an operation for gallstones. He was born at Tipton, Ind., July 21, 1874, received his early education at Butler and Louisville, Ky., was a graduate of the Indianapolis Medical School and took a postgraduate course at the New York Postgraduate School. He began the practice of medicine at Homer, Ind., where he remained ten years, then moved to Rushville, where he continued to practice until the time of his death. Dr. Blount was an active member of the Rush County Medical Society, the Indiana State Medical Association and the American Medical Association.

NEWS NOTES AND PERSONALS

ANDERSON NEWS NOTES

DIPHTHERIA has made its appearance in a very malignant form in this city; three deaths reported with many others infected.

DR. FRANK VAN NUYS of Monticello, Ill., has been spending the past few weeks with his father, Dr. D. H. Van Nuys of this city.

DR. J. C. ARMINGTON is sojourning on the Pacific Coast. He will visit many of the coast cities before his return in the early fall.

DR. JOHN H. LAIL has taken employment with the Schlauterback Chemical Company, Portland, Me., and has located at Seattle, Wash.

THE \$100,000 addition to St. John's Hospital is progressing very rapidly. This will make accommodations for the rapidly growing demands on the institution. As it is now, the hospital is equipped with all modern appliances.

DR. and MRS. J. B. FATTIE are visitors on the Pacific Coast. Dr. Fattie has a leave of absence for one month from his office of chief surgeon of the U. T. Company of Indiana.

DR. THOMAS M. JONES and several business men of the city have purchased the Van Buskerk farm northwest of the city and will lay it out in small tracts for the erection of summer homes.

AN epidemic of typhoid fever is seriously holding many residents of Anderson, especially the Anderson High School Class of 1914. The source of infection is supposed to be due to drinking infected water by the class while picnicing at Mounds Park.

"CHOLERA-INFANTUM" has been noticed for its conspicuous absence in this community this season. It is attributed to better sanitary conditions, with a better food supply for the children who are usually subject to its ravages. The Anderson home tent for children, under the care of Miss Leafy Whorton and Mrs. Stewart, has been ideal this season in so far as care and sanitation has been needed.

INDIANAPOLIS

DR. J. D. GARRETT has returned from a month's visit in Boston.

DR. THOMAS E. STUCKY has been appointed collector of customs for Indiana.

DR. C. R. CROW has been seriously ill. He has been in ill health the past two years.

DR. and MRS. FRANK F. HUTCHINS spent the latter part of August in sight-seeing in Yellowstone Park.

DR. and MRS. J. RILUS EASTMAN of Indianapolis, announce the birth of a son, Joseph Thomas Rilus, Jr.

DR. CARL HABICH has been appointed chief medical inspector in the public and private schools of the city.

DR. and MRS. C. E. STEPHENSON and daughter Helen spent their vacation in a motor trip through Ohio and Indiana.

DR. A. E. MOZINGO, formerly intern at the Methodist Hospital, has been appointed intern at the Metropolitan Hospital, Blackwell's Island, New York.

DR. GOETHE LINK has spent some time this summer at Rochester, Minn., where he took up some special work on diseases of women and abdominal surgery.

DR. DAVIS of Marion, who graduated in the 1914 class Indiana University Medical Department, has decided to spend a year as intern at St. Vincent's Hospital.

THE commencement exercises of the training school for nurses at Neuronhurst, Dr. W. B. Fletcher's Sanatorium, were held August 18, four nurses receiving diplomas.

DR. A. L. MARSHALL, superintendent of the Bobbs and City Dispensary and also of the Protestant Deaconess Hospital, has been taking special work on the eye in Chicago.

DRS. EASTMAN, HOOD and CLEVINGER have returned from the war zone in Europe, apparently with much the same feeling of the man who has escaped from a burning house.

DR. FRANK MCCOOL was married August 16 to Miss Katherine Kruwel. They left immediately for a motor trip through northern Michigan and are now at home at 3333 West Michigan Street.

AMONG the fishermen recently returned are: Dr. John Cunningham and Dr. A. C. Kimberlin, who spent a few days at Lake Wawasee; Drs. Thrasher, Garshwiler and Noble, who were in the Lake region of Wisconsin.

DURING the month of August there were 56 cases of typhoid fever reported to the Board of Health, as compared to 130 of August last year. One case of small-pox was reported, the patient having come to the city from St. Paul, Ind.

THE Medical College Building has been renovated and redecorated from cellar to garret. The woodwork has been stained and the walls painted an appropriate color. The third floor is to be entirely rearranged to meet the indications for better laboratory work.

DR. W. H. FORTNER, who has just completed a year's intern service at the City Hospital, was recently married to Miss Ada Coons. Dr. Fortner and his bride have gone to Princeton, Wis., where they will make their future home, the doctor entering private practice at this place.

DR. VIRGIL MOON, the recently appointed pathologist, will recatalogue the specimens in the old pathological department and place them in new quarters, making them more available for teaching purposes. These improvements together with a properly equipped teaching hospital are some of the visible marks of progress now being made by the Medical Department of the University. Every indication points to a greatly increased efficiency in medical instruction in Indianapolis the coming year.

THE City Board of Health has made the appointments for school inspectors for the ensuing year. There are thirty-four inspectors, an increase of two over last year. The inspectors are required to visit each ward and private school in the city on Mondays, Wednesdays and Fridays of each week, at which time any pupil not thought to be in good physical condition may be referred to the inspector for examination. During epidemics an inspection of the entire school must be made as often as thought best by the Board.

THE Young Physicians' Club held its annual outing at Page's, where about eighty physicians met and after an honor's baseball and other athletic stunts, indulged in as a substitute for a cocktail, fell to with a hearty good cheer and devoured one of the famous chicken dinners for which this place is noted. Perhaps no single factor in the social life of Indianapolis physicians has so much influence in promoting a feeling of good fellowship as does this occasion. About all it requires to promote such a feeling among physicians is to get them together under conditions where the every-day task is forgotten.

GENERAL

DR. J. R. HINKLE of Sullivan has been quite seriously ill.

DR. JOHN W. GRAY of Bloomfield has been quite seriously ill.

DR. I. E. LAWRENCE of Columbia City was married recently to Miss Grace Coyle.

DR. E. D. BERGMAN of Frankfort has returned from a business trip to Bozeman, Mont.

DR. C. O. BECHTOL of Marion has recently returned from a two months' absence in Europe.

DR. G. R. CLAYTON, formerly of Monon, has located at Fowler for the practice of Medicine.

DR. and MRS. G. W. BROWN of Frankfort have gone to Petoskey, Mich., for a two months' vacation.

THE Frances Ford Hospital at Union City was formally opened to the public on September 1.

THE \$100,000 nurses' home, presented to Harper Hospital, Detroit, by Vernon Richmond, has been opened.

DR. H. M. BOUNNELL of Waynetown has been in very poor health for the past few weeks, but is somewhat improved.

DR. J. T. FREELAND, wife and daughter Francis, of Bedford, have returned home from a two months' tour of Europe.

THE Dubois County Medical Society and families enjoyed an outing at High Rock on White River, August 18.

THE physicians of Wayne County and their families enjoyed a very delightful outing at Glen Miller Park on August 5.

THE American Public Health Association will hold its annual meeting in Jacksonville, Fla., December 1 to 5, inclusive.

DR. FRED R. CLAPP of Ligonier leaves this month for New York City where he will take up special work in surgery.

DR. MERRILL DAVIS of Marion has gone to Indianapolis where he will spend a year as intern at the St. Vincent Hospital.

THE Cass County Medical Society have filed a petition for a new county contagious hospital to be located at Logansport.

THE annual meeting of the Ohio Valley Medical Association is announced to be held in Evansville, Ind., November 4 and 5.

DR. A. B. DARLING of Kokomo has been appointed coroner of Howard County to fill the unexpired term of Dr. B. A. Thompson.

DR. E. E. BROCK of Anderson has resigned his position as secretary of the City Board of Health, the resignation to take effect September 1.

DR. HUGH M. BEEBE of Sydney, Ohio, has accepted a position in the department of surgery of the University of Michigan at Ann Arbor.

DR. C. E. VAN MATRE of New Castle has been quite critically ill since his return from a trip on the Great Lakes the early part of August.

GOVERNOR RALSTON has issued a proclamation fixing Friday, October 2, 1914, as Disease Prevention Day, to be observed throughout the state of Indiana.

THE Culver Union Hospital will add a nursery to their building for the special care and attention of small children and babies born in the hospital.

PLANS for a "tuberculous census" to be taken in September are being made by the National Association for the Study and Prevention of Tuberculosis.

DR. A. A. WILLIAMSON, formerly of Indianapolis, has opened an office at Portland, and will make a specialty of the diseases of the eye, ear, nose and throat.

TWO additional cases of bubonic plague were discovered in New Orleans on August 13, making seventeen in all since the discovery of the first case on June 27.

DR. BROWN S. MCCLINTIC of Peru has been appointed to act as a Red-Cross surgeon in Europe during the present war, and will leave at once for the front.

DR. G. H. STONER of Valparaiso will fill the office vacated by the resignation of Dr. D. J. Loring as examining physician for the Porter County Pension Board.

DR. SEVERANCE BURRAGE, associate professor of sanitary science in Purdue University, Lafayette, has been elected president of the Indiana Academy of Sciences.

DR. J. H. STORK of Stendal, suffered a very painful accident on August 10 when a small hand truck struck his leg breaking both bones between the knee and the ankle.

DR. and MRS. J. S. SMITH, with a party of friends, attended the National Grand Army Encampment at Detroit, and also visited Buffalo, Niagara Falls, and other eastern points.

DR. C. C. RAYL of Monroe, who has but recently returned from a year's stay in Europe, has received an appointment to go to Europe with the American Red Cross as surgeon.

THE annual meeting of the Kentucky State Medical Association will be held in Newport, Ky., September 24, 25 and 26, under the presidency of Dr. W. O. Roberts of Louisville.

DR. F. H. BATMAN of Bloomington has gone to New York City to take up some special work in the New York Postgraduate School. Mrs. Batman and daughter Helen accompanied him.

DR. J. W. HILL of South Bend has been chosen by the Progressive Committee of St. Joseph County as the nominee for coroner, filling the vacancy caused by the death of Dr. Butterworth.

DR. MAX A. ARMSTRONG of Lebanon has been appointed to succeed Dr. T. B. Johnson of Jamestown, as a member of the Pension Examining Board of Boone County, Dr. Johnson having resigned.

DR. MALCOLM L. HARRIS of Chicago announces the removal of his office from the Reliance Building, 32 North State Street, to Suite 1117 Marshall Field Annex Building, 25 East Washington Street.

DR. C. P. HUTCHINS, for the past three years director of physical education of the Indiana University at Bloomington, has resigned and will go to Rochester, N. Y., where he will enter the practice of medicine.

DR. LEONARD A. ENSMINGER has recently been appointed surgeon-general for the Monon Railroad in Indianapolis. Dr. Ensminger also represents the Illinois Central and Big Four railroads as surgeon-general in Indianapolis.

DR. H. M. EGOLF of Liberty has retired from active practice for an extended vacation. He will spend some time in Michigan, and expects to go to the Pacific Coast next spring, taking in the Panama-Pacific Exposition. Dr. J. F. Mitchell of Everton has charge of Dr. Egolf's practice during his absence.

DR. GRANT FERGUSON, a member of the medical staff of Johns Hopkins Hospital, Baltimore, has gone back to his native land, Scotland, to take part in the European war. It is also reported that Dr. Alexis Carrel of the Rockefeller Institute for Medical Research, has gone to the front in the French army as surgeon.

EXAMINATION of candidates for assistant surgeon in the Public Health Service will be held at Washington, New Orleans, Boston, Stapleton, N. Y., Chicago, St. Louis and San Francisco, October 19. Assistant surgeons receive \$2,000 per year. For information, address "Surgeon-General, Public Health Service, Washington, D. C."

PHYSICIANS from most of the southern states were in attendance at the clinic for the study of pellagra which was held at Pineville, Ky., on August 19, under the direction of Dr. A. M. McCormick, secretary of the Kentucky State Board of Health. Sixty-three victims of the disease from various parts of the mountain sections were in the clinic for observation and personal study.

THE Clinical Congress of Surgeons of North America, at their recent meeting in London, elected the following officers for the coming year: President, Charles H. Mayo, Rochester, Minn.; first vice-president, H. A. Bruce, Toronto; second vice-president, Robert D. Dickinson, Brooklyn, N. Y.; secretary, Franklin H. Martin, Chicago; treasurer, Allen B. Kanaval, Chicago; general manager, A. D. Ballou, Chicago.

THE Thirteenth District Medical Society held a very interesting and profitable session at The Inn, Winona Lake, on August 20. About fifty physicians and their families were there. The next meeting will be held at Rochester next

spring. The following officers were elected for the ensuing year: President, J. A. Work, Elkhart; vice-president, W. S. Shaffer, Rochester; secretary-treasurer, C. N. Howard, Warsaw; councilor, A. C. McDonald, Warsaw.

THE Gary Medical Society, Gary, Ind., have organized a "rating agency" to protect themselves from those who make no pretense of paying for professional services. In cases of emergency or in cases where the non-payment of bills is due to being out of work or other justifiable causes, no attention will be paid to the report of the rating agency. A "rating secretary" has been appointed, who, with five other members of the Gary Medical Society has charge of the agency.

THE following Indiana doctors have recently returned from Europe: J. C. Kelly, Mitchell; M. M. Clapper, Hartford City; Frank Holland, Bloomington; Howard Shafer, Rochester; C. O. Bechtol, Marion; Wm. Clevenger, Thomas Hood, J. R. Eastman, Indianapolis; Marcus Ravdin, Evansville; G. M. LaSalle, Wabash; J. E. Doerr, Mt. Vernon; H. H. Martin, LaPorte. Word has been received from Drs. Frank Crockett of LaFayette, Linn Rogers of Logansport and Melvin Mix of Muncie, stating that they expect to remain in Europe until traveling conditions are a little more favorable.

SOCIETY PROCEEDINGS

FORT WAYNE MEDICAL SOCIETY

Meeting of Jan. 6, 1914

Society met in regular session in the assembly-room of the courthouse with twenty members present.

Meeting called to order by President Dancer.

Minutes of previous meeting read and approved.

Clinical cases:

Dr. M. F. Porter, Jr., reported three cases of streptococcal infection.

DISCUSSION

DR. ROTHCHILD: Biers' clinic shows a number of these cases which get well by local hyperemia.

DR. WEAVER: The most constant condition that these cases showed was increase in white cells and no increase in the "poly" count; was probably due to a localization of the infection.

DR. PORTER (in closing): The individual who runs a temperature of 104 cannot be said to have a localized infection. In one case reported the blood gave a negative culture, but that need not say that that was a localized infection.

DR. B. Van Sweringen reported a case of Colles' fracture and exhibited Roentgen-ray plate of case. Reduction was done without ether. He also reported a

case of female, six weeks following labor, at which time she had perineal tear, became septic, was given an intra-uterine douche, after which she ran a high temperature and rapid pulse. Localization of infection in double pyosalpinx; laparotomy drainage, tubes left *in situ*—case recovered.

M. F. PORTER: Our interpretation of Roentgen-ray pictures is poor, and show a good alignment of fractures when such is not the case; that is when a single negative is taken, a double view of all fractures should be taken. What Dr. Van Sweringen said concerning treatment of this tube case is believed to be true by most of the good men of the country, i. e., a conservative treatment of the tubes in extreme sepsis postpartum, is correct. I recall one case which had a large tumor at the side of the epigastrium. Drainage saved this case. I think all sorts of mechanical interferences in puerperal septic cases should be avoided until the presence of pus decides that it must be evacuated. I have a case in the hospital now illustrating interference from the introduction of the uterine sound to cure sterility, which produced a stirring up of a latent gonococcal infection, resulting in the necessity for operation.

DR. MACEVOY: For several years I have been making a collection of Roentgen-ray plates, fractures principally. It is peculiar how many different varieties there are. In some fractures it is impossible to get a good looking bone. I think there should be some hesitation on the part of the physicians in showing every Roentgen-ray plate to the patient for the reason that they misinterpret the possible result even if the bones are in good alignment.

DR. WEAVER: I think that Dr. Van Sweringen is fortunate in getting the result that he did without an anesthetic in this Colles' fracture. I believe that every Colles' fracture should have an anesthetic.

DR. VAN SWERINGEN: I only wish this little spicule of bone were in better line. I am in accord with Dr. Weaver that every case should have an anesthetic. It may be necessary to subject these cases of double infection (postpartum), treated by drainage, to a laparotomy for the removal of the tubes later on, but even if it does, the patient would be in better general condition for that operation when she surely would have succumbed had any radical procedure been attempted at the time this operation was made.

DR. DIXON: I always use a Levis splint. It does not make any difference what splint you use so long as you keep the bones approximated.

Motion made that the secretary be instructed to write a letter in response to Dr. Eric Crull's letter of thanks to the members of the society on retiring from the office of secretary of the city Board of Health. Communication from the attorney-general of the state Board of Health relative to the law governing the license of physicians to practice medicine in the State of Indiana read. Motion carried that a letter of thanks be sent to the attorney-general for his courtesy in replying to the secretary's questions.

Annual reports of the secretary and treasurer for the year 1913 were read. Motion carries that auditing committee be appointed by the president to audit same. President appointed Drs. Metcalf, Rhamy and Beall.

Report of treasurer, Dr. E. E. Morgan, for the year 1913, submitted:

Report of secretary, G. Van Sweringen, for the year 1913:

Membership total, Jan. 1, 1914, ninety-four active, two honorary and two non-resident.

Elected to membership during 1913, eight—Drs. Edlavitch, Farnham, Schrader, Bowers, Zehr, Moser, Hostetler and Erwin.

Deceased during 1913, one—Dr. R. Parks White.

Withdrawals, one—Dr. George J. Studer.

Suspension (for non-payment of dues)—Drs. Frank Dinnen, Evans, Geary, Gilpin, Stults, Greenwell, Ray and Schlosser.

Received on transfer, one—Dr. W. O. McBride.

Total membership for 1912, ninety-seven active, two honorary and one non-resident.

Number of meetings, forty.

Total attendance, 497; average, 16.

Largest attendance, May 28, St. Joseph Hospital.—37.

Smallest attendance, November 11—12.

Number of papers read, 32. Took part in discussion of same, 20.

Specimens presented, 16.

FINANCIAL

Balance on hand, Jan. 1, 1913.....\$195.51

Received in dues and from other sources 477.51

Amount of which was turned over to treasurer, and receipt received.

Total \$673.02

Balance in treasury, Jan. 1, 1914 \$204.02

Respectfully submitted,

G. VAN SWERINGEN, Secretary.

Meeting of Jan. 13, 1914

Society met in regular session in the assembly-room; nineteen members present.

Meeting called to order by president.

Minutes read and approved.

Clinical cases:

Dr. Glock reported a case of gonorrheal conjunctivitis.

REPORT OF CASE

....., female, age 17. First seen Nov. 21, 1913. Eyes had been sore for about three weeks, sight not affected, conjunctiva red, slight secretion, eyelids felt rough and itched. Treated by advertising quack. Five days ago right eye suddenly became violently inflamed. Treatment unchanged and left eye not protected. Three days later left eye also became violently inflamed. Two days later family physician called in, when he referred her to me.

S. P. Thick pus streaming from both eyes, eyelids swollen shut, conjunctiva of each eye inflamed and chemosed, right cornea very milky, left cornea clear; photophobia. Pus showed gonococci.

Patient sent to hospital; two special nurses employed, eyes cleansed every twenty minutes day and night, hot applications used every other hour, 2 per cent. solution of silver nitrate applied to lids once daily, and a 1 per cent. solution of atropin dropped in right eye.

Patient first seen late in afternoon and a canthotomy not done as right cornea already in a hopeless condition and left cornea in no immediate danger. Next morning the right cornea showed large central slough. A canthotomy was done on each eye, conjunctiva scarified to reduce chemosis, and a 1/2000

solution of formalin ordered dropped in right eye after every other flushing.

On November 26 ulcer appeared on outer margin of left cornea. This attained a diameter of $2\frac{1}{2}$ mm. and perforated on November 30. Use of formalin solution was begun in left eye also with appearance of ulcer.

December 5, both anterior chambers had begun to reform.

December 12, patient left hospital. Right eye was sightless, cornea slightly bulging. Left cornea was clear except scar at outer margin 3 mm. in diameter. Iris adherent to cornea and pupil enlarged horizontally but sight good.

A vaginal examination was made at this time and smears made of both vaginal and uterine secretion, the slides being examined by Dr. Rhamy, who reported an absence of gonococci or any signs of a recent inflammation.

Staphyloma of right cornea continued to increase in size, eye became slightly painful and patient could not see with left eye unless right eye covered, so on Jan. 7, 1914, right eye was enucleated.

This case is reported because I believe it to be a case of accidental infection transmitted by the irregular practitioner, whose work is mostly in venereal diseases.

The patient denied ever having a vaginal discharge or any vaginal trouble, which was borne out by pathologist's report.

Dr. McOscar reported following case: Female, 17 years of age. Seen Jan. 11, 1914, with Dr. R. B. McKeeman, who, without a vaginal examination, diagnosed retained menses, as patient had never menstruated. Complained of right abdominal pain, beginning 36 hours previously, and had been obliged to leave work as cashier. At 8 p. m., after she had walked home, a distance of 16 blocks, and gone to bed, she was seen by me six hours later. Examination revealed a tumor the size of a child's head above the pubes in the middle line with an irregular mass extending from it to the right. A distinct depression existed between the two swellings which could be outlined through the abdominal wall with the finger. Vaginal examination showed a tense bulging, even with the labia, completely obliterating the vagina. Patient was removed to the hospital—the bulging hymen was incised in the medial line. Three pints of thick, brown fluid, of tarry consistence and stringy in character, was discharged. The abdomen became flat. Vagina was irrigated with saline solution, and a 1-inch tube was inserted through the incised hymen to support the margins and maintain drainage. Patient never had any symptoms suggestive of a menstrual period; two months ago noticed a swelling in the right abdomen, attended with right-sided pain, which enlargement she asserts disappeared within a few days.

Dr. Bruggeman read a review of surgery for 1913.

DISCUSSION

DR. PORTER: Referring to the question of appendicitis, in a paper read before the Western Society of Surgeons it was advocated that the removal of the appendix was good surgery in all cases where the peritonitis was circumscribed. This rule does not apply to advanced peritonitis or non-localized cases. I will have to be shown that to wait until after the

diagnosis of appendicitis is made is a good plan. I was rather surprised that the oil and ether anesthesia, especially in operations on the respiratory tract, was not more thoroughly discussed. The objection to this method is that you cannot regulate the doses of the anesthetic accurately. The experiment given by Moore in one paper showed that the periosteum under some circumstances is a osteogenetic tissue. In some cases it is not. In connection with radiotherapy, I was surprised to hear the unfavorable results of this method in inoperable malignant cases. The work done in malignant disease of the esophagus is very fantastic but I do not think that it will ever be proved practicable. Plastic work on the common bile duct has been very favorable. Transplant from the rectus is handy and acts just as favorable.

Dr. McOSCAR: Iodin sterilization is good. It should be used on a dry surface. Ninety-five per cent. solution of tannic acid has been used with success.

The use of local anesthesia is coming into more common use.

Dr. B. Van Sweringen reviewed the work of Gwathmey in using oil and ether per rectum as an anesthetic. The method is rapid, fairly well controlled, without unpleasant effects, and is of especial importance in operations involving the respiratory tract.

DR. WEAVER: In radiotherapy cross-fire of the rays is necessary. The expense of the treatment is prohibitive. Quinin and urea hydrochlorid has a more lasting effect than novocain in local anesthesia, but has the disadvantage of frequently causing edema. Bone transplants are replacing Lane's plates in surgery of bones.

DR. BRUGGEMAN: Resection of the esophagus has been done successfully, hence it is practical. Periosteum is probably an osteogenetic membrane. The appendix has been used to replace resected portions of common bile duct.

No business.

Adjourned.

G. VAN SWERINGEN, Secretary.

BENTON COUNTY

The Benton County Medical Society met in called session with Dr. H. G. Bloom, secretary, at Oxford. Meeting was called to order by Dr. Ward A. Smith, with a good attendance. Dr. King of the Indiana State Board of Health was a guest.

After a brief business meeting, the following resolutions were passed concerning the candidacy of Dr. A. Ward Smith for joint senator from Tippecanoe and Benton counties:

We, the Benton County Medical Society, of Benton County, Indiana, being profoundly impressed with the need of protecting the public health in the state of Indiana, and believing that one of the best ways by which we can promote the public health is by being represented in the Indiana State Legislature by a competent and skilled member of the medical profession, to the end that measures may be introduced which will protect the people of our state against quack nostrums of various kinds, and which will induce the passing of needed laws of a salutary nature;

Resolved, That we believe the medical profession should have due representation in both houses of the State Legislature.

And Be It Further Resolved, That we heartily endorse the candidacy of Dr. Ward A. Smith for joint senator from Tippecanoe and Benton counties, and we pledge ourselves to use our utmost endeavors to secure his election.

We further recommend Dr. Smith to the public as an ethical practitioner and we believe that, if he should be elected to the office of state senator, his services in that body will be invaluable to the people of Indiana.

Dr. Smith is cordially recommended to the voters of Tippecanoe and Benton counties for their support; he is well known and is now president of the Benton County Medical Society and has already served three annual sessions as such president.

The society then adjourned to the Crystal Theater where Dr. King delivered a special lecture under the auspices of the Anti-tuberculosis Association. The lecture was attended by the public and much interest was manifested.

H. G. BLOOM, Secretary.

BOONE COUNTY

The Boone County Medical Society met in regular session at Lebanon Public Library, Lebanon, August 4, at 8 p. m. In the absence of the president, Vice-President Dr. J. H. Black occupied the chair. Eight members present and one visitor, Dr. Clifford Flannigan of Louisville.

Dr. J. R. Ball of Lebanon read a paper on "Eclampsia." He reviewed the recent theories on etiology and pathology briefly, gave a detailed account of modern treatment during pre-eclamptic stage, emphasized rest, diet, catharsis, hot baths, and diuresis; recommended taking blood-pressure at least every other day, a sudden rise being a warning not to be disregarded; measures twenty-four-hour urine continually. In speaking of treatment after the first convulsion, he emphasized necessity of immediate emptying of uterus, citing the statistics to show that when this is done in the first three hours mortality is very much below the cases that run from three to twenty-four hours before the uterus is empty. He believes the interest of mother and that of child are identical—whatever is best for one is best for the other. To stop the convulsions uses morphin, gr. $\frac{1}{4}$ to gr. $\frac{1}{2}$ hypodermatically, using chloroform or ether when necessary. Recommended more careful supervision of the expectant mothers.

DISCUSSION

DR. C. H. SMITH, Lebanon: Doesn't know about etiology; doesn't have time to think of it when confronted with puerperal eclampsia. Cites a case and speaks of bleeding in the treatment.

DR. P. B. LITTLE, Whitestown: After an experience with nine cases with one death, has come to rely on veratrum to check convulsions, believing that morphin locks up secretions preventing elimination of the toxins, whatever they may be. Goes on record as opposing cesarean section in these cases, believing in rapid dilatation under chloroform and instrumental delivery. Speaks of bleeding as a treatment in full-blooded, possibly followed by hypodermoclysis and normal salt flushing of bowel.

DR. WILLIAMS, Lebanon: Did not get in in time to hear the paper, but in discussing the discussion states that cesarean section is all right in experienced hands in a large institution, after visibility of the child, but

in small communities dilatation and instrumental delivery is more practical and nearly as rapid. Uses veratrum or morphin as indicated by pulse and blood-pressure to stop the convulsions.

DR. J. H. BLACK, Lebanon: Asks if the eye symptoms, edema of retina, optic nerve disorders and disturbance of vision usually or always clear up with recovery from other symptoms.

DR. ARMSTRONG, Lebanon: Objects to sweating in treatment as tending to concentrate toxins in the blood by elimination of liquids and not the toxins.

DR. BALL, Lebanon (closing): Theories of little use at the bedside unless accompanied by a practical working knowledge. States that eye symptoms clear up promptly after delivery. Pregnancy being the cause, the only course to pursue is to empty the uterus promptly. When the convulsions come up after delivery, eliminate by every channel.

DR. C. H. SMITH was appointed a committee of one to prepare an order of business for future use of the society.

Adjourned.

M. A. ARMSTRONG, Secretary.

DELAWARE COUNTY

Regular meeting of Delaware County Medical Society was held in Muncie public library, Aug. 7, 1914, at 3 p. m. and was called to order by Past-President and Councilor Dr. G. W. H. Kemper.

Dr. F. E. Hill presented a paper on "Some Business Points in Practice," saying in part: To be a successful physician, a man must be more than an educated doctor. The educated, refined, cultured doctor who wears his life out serving a dishonest clientele and dies poor has not been a success. To be a success he must study business methods, put them in practice, and not die poor.

Let us consider the subject under the following heads: 1st, Preparation for practice. 2nd, How to procure practice. 3rd, How to hold practice. 4th, Collections. 5th, Investments.

One would naturally suppose a collegiate education before entering medical school would enable a physician to surpass his less fortunate brother, but it does not always work out this way. Many ultrascientific men who practice theoretically under microscope and test-tubes have been unfitted to successfully manage everyday belly aches of the human race. On the other hand, a whole army of doctors with meager education, little or no scientific attainments, are enjoying an extensive, paying practice. The former has been taught to treat *disease* scientifically; the latter has been taught to treat a sick *patient*. The successful practitioner must know much of psychology.

No matter how well qualified, the physician cannot make a living without patients; he cannot get patients without being known; he will not become known until he advertises himself in one way or another. The ultra-ethical call it "getting acquainted." Some select the church route and work the organization for all it is worth. Others join lodges, which, by the way, is a good place to advertise. Doctors who hold official positions have an excellent opportunity to keep their name continually before the public. Others make fictitious calls in a conspicuous conveyance through a busy street, and not a few let the reporters know every time an accident or emergency patient is treated by them, yet they are opposed to advertising. However, there is a legitimate field for advertising and the

sooner physicians wake up to the fact the sooner our city will be rid of blatant quacks and pretenders. Suppose we would insert in our daily papers the following: "Any of the physicians whose names appear below administer salvarsan." Gentlemen, we would benefit ourselves, the community, and limit the pilferings of the mercenary quacks.

How to hold patients. The genial, good mixer, who gets sunshine out of life and knows how to radiate it will hold his patients easier than his more sober brother who looks as if he might be nursing a grouch. The really successful man must remember names and faces, cultivate society and learn the financial value of a "glad hand" and kind word. The worst thing a doctor can do is to antagonize the ignorant whims of an egotistical woman. He cannot change her mind but he can change her kind feelings for him and she may become his active enemy. There is no sensible reason why a physician should put himself crosswise to his fellow men. If the young doctor is a single man he should lead an exemplary life and cultivate the affections of the daughter of a wealthy leading citizen. His education, social and professional attainments will make him a desirable son-in-law, and his future is secure. A good way to hold practice is to appear busy. Instruct all patients to call at the same hour. An office full of patients impress each other. In conversing they are likely to magnify their ills and exaggerate benefits they are getting from treatments.

It is a mistake for the so-called regular physician to ignore the irregular schools and cults. They are all doing practice and making money, and in good families, and the important fact is they sometimes cure where the regulars fail. This means that mental science has been neglected by the regular physician. We had better learn some of the methods used by the numerous cults that are encroaching on our field. It is a mistake to try to convince a patient he is not sick. Humor him, accept his diagnosis and cure him. Everybody likes sympathy; the physician who has this to spare adds to his personality and endears himself to his patients.

A doctor not only treats a sick patient, he must handle the family and the neighborhood. The hardest job he has is to keep the neighbors from meddling and having him discharged. Diplomacy in surgical cases is a great factor. The abrupt statement, "You must be operated on" has caused many a physician to lose his patient.

Collections.—Physicians are brave men except in one thing. They fear they will offend their patients, lose their patronage and influence if they try to collect their bills. There is no sense in such lack of business methods. A doctor's worst enemies are the ones who owe large bills. Several physicians might club together, hire a good collector, pay a straight salary, and have the people learn that doctors are working for pay, and incidentally get rid of parasites on the medical fraternity.

Investments.—The best investment is in knowledge and equipment. Money spent in postgraduate work brings a good interest. If I were starting in to practice I would attempt to excel my neighbor in efficiency. I would buy competency. Competency coupled with affability and energy brings reward. Money not needed for postgraduate work or office equipment is best and most safely invested in real estate.

Adjourned.

H. D. FAIR, Secretary.

GRANT COUNTY

The August meeting of the Grant County Medical Society was held in Upland August 24. Dinner was served in the Methodist Church at 7 o'clock.

Literary session called to order by the president in the Odd Fellows Hall. Minutes of previous meeting read and approved.

The paper of the evening, "Fads and Fancies" was given by Dr. L. D. Holliday.

Drs. Cameron, Bechtol and Braunlin were appointed a committee to investigate prices of drugs and to ascertain conditions pertaining thereto.

Drs. Knight and Loomis appointed as additional members on the building site committee.

September meeting to be held in Rigdon, with Dr. Vigus in charge of preparations.

Adjourned.

J. E. JOHNSON, Secretary.

LAKE COUNTY

The annual picnic of the Lake County Medical Society was held at Cedar Lake, Thursday, August 13, the members and their families being present. Total attendance about ninety. Dr. J. W. Iddings, our president, was host.

The early afternoon was spent in various games, chief among which was "Horse Shoes." In this tournament Drs. Young and Hosner won the championship. The ladies and children were given a boat-ride around the lake.

Baseball was next on the program, Drs. McMichael of Gary and White of Hammond choosing sides. After two innings of very strenuous exercise, Dr. McMichael's team was declared a winner, the score being 6 to 0. Dr. Reyher chose to risk life and limb as umpire. The game was called early, due to the ringing of the dinner bell at Binyon's Hotel. Here an old-fashioned chicken dinner was served.

Various prizes were awarded to the aspiring and perspiring pseudo-athletes, Dr. Young of Hammond being awarded the all-around championship medal—a plate of tin, 1 foot in diameter, and bearing the legend "Champeen."

On motion Dr. Iddings was voted the thanks of those present for having provided the best entertainment we have ever had at our annual outing.

E. M. SHANKLIN, Secretary.

PARKE-VERMILION COUNTY

Parke-Vermilion County Medical Society met at Dana, August 4, the guests of Dana physicians, with Dr. Henry Washburn in the chair. Attendance 26.

Minutes of preceding meeting read and approved.

Names of Dr. Pritchett of Dana and Dr. Sanford of Quaker presented for membership and passed to the membership committee.

Case Report.—Dr. Swain of Hillsdale reported a case of quinin poisoning. Child, four and a half years old, swallowed some forty or sixty chocolate-coated tablets containing 2 gr. quinin. Saw the case in two hours. Temperature 96 and pulse 60 at 11 a. m.; temperature 99 and pulse 80 at 1 p. m., and temperature 105 and pulse 160 at 2:30 p. m. Child had convulsions like those of strychnin poisoning, death occurring at 6:30 p. m.

Case Report.—Dr. Newhouse reported a case of man drowning in an artesian water swimming-pool, rescued

from water after being under four minutes, regained consciousness in ten minutes through artificial respiration, then went into a state of coma, remaining there six hours. Doctor wanted to know if the hydrogen sulphide in the water had anything to do with loss of consciousness. Water tested .037 per cent.

General discussion.

Case Report.—Dr. Bloomer reported case of sarcoma of the humerus.

Discussed by Dr. Woodard, Dr. Weinstein and Dr. Pearce.

Dr. Weinstein of Terre Haute, counselor of Fifth District, was present and made a few remarks for the good to be obtained in attending the State Medical Association and urged that every member go to LaFayette in September.

Musical program and luncheon served by physicians of Dana.

Adjourned.

R. E. SWOPE, Secretary.

THE TRUTH ABOUT MEDICINES

PROPAGANDA FOR REFORM

ADMINISTRATION OF FRUIT ACIDS.—The administration of the salts of ordinary fruit acids is useful whenever it is desired to increase the alkalinity of the blood and diminish the acidity of the urine. Important investigations indicate, however, that it is scarcely feasible to produce any very marked effect on the alkalinity of the blood in this manner. If the physician believes that the alkalinity of the blood is an important factor in the recovery from gout and rheumatism, the administration of the salts of fruit acids is appropriate. Citrates should be preferred to tartrates, for the latter are imperfectly converted to carbonates and, when given in large quantities, may cause irritation of the kidneys (*Jour. A. M. A.*, Aug. 1, 1914, p. 420).

VERACOLATE, MARCY & Co.—Veracolate is a proprietary said to consist of the salts of the bile acids, sodium glycolate and sodium taurocholate, with cascara and phenolphthalein. While bile salts are said to increase the secretion of bile, it is doubtful whether this increase in the secretion of bile is of value in the treatment of gall-bladder affections. There is no occasion for the use of bile salts combined with fixed quantities of cathartics, which should be added only when they are needed. The advertising claims for Veracolate show a tendency to extravagant statements (*Jour. A. M. A.*, Aug. 1, 1914, p. 420).

HECTINE.—Hectine, referred to in newspapers as a treatment for hay-fever, is a French proprietary, stated to have a composition similar to that of atoxyl. If its composition is in accordance with the claims its action is probably no better than that of atoxyl. Arsenic is used in the treatment of hay-fever with success in some cases (*Jour. A. M. A.*, Aug. 8, 1914, p. 502).

TOXICITY OF CAMPHOR.—A case is reported in which an 18-months-old child was given, after a meal, a teaspoonful of camphorated oil (linimentum camphorae) by mistake. While this dose must have contained about 15 grains of camphor, no untoward symptoms were observed (*Jour. A. M. A.*, Aug. 15, 1914, p. 579).

ASSIMILATION OF CALCIUM PHOSPHATE.—Extensive experiments have demonstrated the availability of calcium phosphate for the bone formation of growing infants. This is a further proof of the power of the human organism to utilize inorganic substances (*Jour. A. M. A.*, Aug. 15, 1914, p. 581).

POISONING BY BORIC ACID DRESSING.—While wet boric acid dressings are harmless, this is not true of dry, powdered or crystallized boric acid. Alarming symptoms resulted from the application of dry boric acid to wounds caused by a burn (*Jour. A. M. A.*, Aug. 15, 1914, p. 593).

PODOLAX.—A report from the A. M. A. Chemical Laboratory showed that PoDoLax, claimed to be "Podophylin with the Gripe taken out," is a phenolphthalein nostrum. PoDoLax is being extensively advertised by the E. E. Sutherland Medicine Company of Paducah, Ky. From the analysis made, it appears that PoDoLax is an aromatized syrup, containing phenolphthalein in suspension and fortified by the addition of an extract of senna. Its laxative action is due chiefly to the phenolphthalein, of which each dose contains about 1.8 grains. Podophylin was not found to be present (*Jour. A. M. A.*, Aug. 15, 1914, p. 595).

SHORTAGE OF DRUGS.—In view of possible drug shortage, physicians should bear in mind that many proprietary foreign preparations are made and sold in the United States under their descriptive names, thus dionin as ethyl morphin hydrochlorid, urotropin as hexamethylenamin and Diuretin as theobromin sodium salicylate (*Jour. A. M. A.*, Aug. 22, 1914, p. 692).

MIXED VACCINE AND PHYLACOGENS.—The unscientific character of mixed vaccines and of the mixed filtered products of a number of vaccines marketed as "Phylacogens" has been especially emphasized and the danger from their indiscriminate use pointed out. Recently John F. Anderson held that the claim that the combination of dead bodies or the filtered products of a number of different bacteria are useful for the treatment of certain diseases with a specific cause, closely approaches quackery. Victor C. Vaughan also has pointed out the danger of the indiscriminate use of bacterial products and observed that untoward results are rarely reported. Physicians who are tempted by the optimistic statements of manufacturers to give complex bacterial products a trial, should remember that the warnings of disinterested scientists are of far more value than uncritical clinical reports put out under commercial auspices (*Jour. A. M. A.*, Aug. 29, 1914, p. 785).

THE RADIO-ACTIVITY OF SARATOGA SPRINGS WATER.—An estimation of the radio-activity of Saratoga Springs water, made by the United States Bureau of Mines, shows that the activity is due in the main to radium emanation, which is therefore readily lost, and not to dissolved radium salts. The total activity of the water is rather low, that of the Crystal Rock spring, though not exceptional, is considerably above the average. The activity of different springs varies widely, some being more than twenty times as active as others. A similar variability is known to exist at Hot Springs, Ark., but only the vaguest information has been made public by our government (*Jour. A. M. A.*, Aug. 29, 1914, pp. 788 and 795).

RADIUM IN CANCER.—Radium can be used successfully to destroy growths on the surface whose entire extent can be exposed to its energy. Extensive growths involving deep structures and disseminated growths are beyond its control, and there is no reason to believe that they will ever be brought within its control. The effects and the limitations of radium in the treatment of cancer are the same as those of the Roentgen ray (*Jour. A. M. A.*, Aug. 29, 1914, p. 787).

PERTUSSIS VACCINE.—The Bordet-Gengou bacillus is recognized as the cause of whooping-cough and a vaccine prepared from it is used with success, although it is the general experience that when a child is already in the stage of incubation, the vaccine will

not prevent the development of the disease (*Jour. A. M. A.*, Aug. 29, 1914, p. 796).

SCARLATINA VACCINE.—The so-called scarlatina vaccine is said to consist of killed streptococci from scarlet fever cases. While the infectious agent of scarlet fever has not been established, the close association of streptococcus with scarlet fever has been considered a warrant for the use of antistreptococcus serum, and various vaccines prepared from this organism, in the treatment of scarlet fever (*Jour. A. M. A.*, Aug. 29, 1914, p. 796).

BOOK REVIEWS

THE MEDICAL AND SANITARY INSPECTION OF SCHOOLS.

By S. W. Newmayer, A.B., M.D., in charge of the Division of Child Hygiene, Bureau of Health, Philadelphia. 12mo, 318 pages, with 71 engravings and 14 full page plates. Cloth, \$2.50, net. Lea & Febiger, publishers, Philadelphia and New York, 1913.

The subject of Medical Inspection of Schools can now be said to have passed the experimental stage inasmuch as its intrinsic value to the community at large has become recognized by the majority of the thinking public. There are, however, still many impediments placed in the path of progress of the conscientious inspector, as for instance, the all too common antipathy against properly stripping a child for thorough physical examination, as well as the widespread feeling against school instruction in sexual hygiene. The time will come no doubt, however, when school inspection will be as well recognized an economic feature for the community as is the present municipal health department, but like the latter instrument of social welfare school inspection lacks the financial support that it should have from practically every community. There is no medical inspector who does his work thoroughly who is not just as much entitled to adequate compensation for his time and labor as is the efficient health officer, but unfortunately, the need for men especially trained in both of these branches is not as yet properly appreciated and until such time as it is, adequate funds will probably not be available.

The little book here presented offers in its few pages some invaluable information of a most practical sort to those interested in the work and since, as yet, textbooks on the subject are all too few it should be in the hands of every physician and nurse undertaking the work. It is probable that there are few men in this country who have had a wider training from a practical standpoint in this line of work than Dr. Newmayer and his suggestions should be both timely and valuable.

CAUSES AND CURES OF CRIME. By Thomas Speed Mosby, Member of the American Bar; former Pardon Attorney of the State of Missouri, etc. Pp. 354, Illustrated. Cloth; price, \$2.00. C. V. Mosby Co., St. Louis, Mo.

In this little work there is much of interest not alone to the penologist and the psychiatrist, but to the intelligent layman as well, and particularly the woman who pins her faith to equal suffrage as a panacea to all crime. Indeed, the author's tribute to

womanhood and his metaphors of motherhood, are shining examples of a diction that fairly scents from its fragrant perfume. Throughout the volume one feels that there is back of a close observer, the mind of a keen reader of human nature, in which there is sprinkled an occasional bit of very refreshing humor.

The author makes very plain his lack of faith in capital punishment as a cure for crime, and his belief in education and training as potent factors both in crime prevention and advance in social economy.

The little book, besides containing considerable information on the subject at hand, affords a most interesting and delightful work to read.

A TREATISE ON DISEASES OF THE RECTUM AND ANUS.

Edited by A. B. Cooke, A.M., M.D., formerly Lecturer on Diseases of the Rectum and Professor of Anatomy in the Medical Department, University of Nashville, Assisted by six collaborators. With 215 illustrations in the text and 21 full-page plates, 7 in colors. Price, \$5.50. F. A. Davis Company, Philadelphia. English Depot: Stanley Phillips, London, 1914. The volume is dedicated to Dr. Joseph M. Mathews, "The Pioneer and Nestor of American Proctology."

In the foreword we are told that the publishers are really responsible for this addition to medical literature, for the author had laid aside the work which he had commenced years before and later took it up again at the earnest solicitation of the publishers. There are 610 pages in the text, divided into 30 chapters of which 16 are by the editor and the remaining 14 by the collaborators. The first chapter is devoted to Anatomy and Physiology and the second to General Diagnosis, Symptomatology, Examination, Instruments, etc. In the succeeding chapters the various diseases, injuries, malformations and neuroses are treated, and one chapter each is devoted to a consideration of Local Anesthesia in Anorectal Surgery, Rectal Pathology Due to Extrarectal Causes; Relation of Rectal Diseases to the General Health, and Rectocolonic Alimentation. A typographical error makes one of the authors (Geo. B. Evans) Proctologist and Neurologist, etc., instead of Proctologist and Urologist.

In the light of present knowledge concerning the efficacy of emetine in amebic dysentery, one is hardly justified in saying that the "routine administration of any remedy is to be condemned" or that "with the large majority of clinicians irrigation constitutes the main dependence of treatment." Few surgeons will agree that the elastic ligature has any place in the treatment of fistula. Five pages are given to a discussion of the subject of the injection treatment for piles and yet the author says that this treatment "when contrasted with any one of the recognized radical operations falls short in every count." The question naturally arises, Why waste space in describing a method of treatment which in the author's own words "has no sound basis of merit"?

There are many who will dissent from the opinion of the author (Wm. M. Beach) in the chapters on stricture when he says that "post-operative care of anal wounds presupposes daily attention for ten days, and once a week for a month in cases of fissure, ulcers,

hemorrhoids, and other diseases requiring incisions"; and more perhaps who will question his statement referring to the prevention of stricture following operations for fissures, hemorrhoids and other diseases requiring incisions that "a too rapid course of healing is conducive to an obstructive cicatrix." The danger of stricture formation after operations lies not in the rapidity of the healing but in the manner. Other things being equal, the more rapid the healing after an operation the less the danger of stricture. The ultimate object in dividing a stricture is to lengthen the cicatricial band surrounding the strictured tube, whether rectum, urethra, esophagus, or what not, and the quicker healing takes place provided this lengthening is accomplished, the less likelihood of a recurrence of the trouble.

The routine use of packing saturated with adrenalin chlorid or a solution of persulphate of iron to secure hemostasis cannot be commended. Malignant Tumors of the Rectum is a subject that should receive more consideration than can be given it in 32 pages, which is the space allotted to it in this volume.

While there is much in this volume to be commended, a thorough and painstaking revision will be necessary in order to bring it up to the standard one has a right to expect from a reading of the title page.

PROGRESSIVE MEDICINE. A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences, edited by Hobart Amory Hare, M.D., assisted by Leighton F. Appleman, M.D. Volume II. June, 1914. Contributors: John G. Clark, M.D.; William B. Coley, M.D.; John C. A. Gerster, M.D.; Edward Jackson, M.D.; Alfred Stengel, M.D. *Hernia—Surgery of the Abdomen, Exclusive of Hernia—Gynecology—Diseases of the Blood, Diathetic and Metabolic Diseases. Diseases of the Spleen, Thyroid Gland, Nutrition, and the Lymphatic System. Ophthalmology.* Lea & Febiger, Philadelphia and New York, 1914. Subscription price, \$6.00 per annum.

The article on hernia is quite extensive and contains a number of interesting illustrations. While nothing particularly new is brought out, the review of the subject is complete. Worthy of special mention is the part on rare forms of hernia, particularly diaphragmatic hernia. Under surgery of the abdomen the subject of the prevention of adhesions seems to have been put on a rational basis by Coffey's investigations and Pope's experiments. The deductions are, (1) Thorough asepsis. (2) As little handling as possible. (3) Avoidance of all traumatism and exposure to the air, as far as can be. Of various substances injected into the peritoneal cavity after scarification, eamphor oil gave the worst results and a solution of sodium citrate, 2 per cent., with sodium chlorid, 3 per cent., gave the best results in preventing exudates and adhesions. The technic of Jianu's method of gastrostomy is given. It is the simplest and safest of all operations so far devised for fashioning an artificial esophagus from the stomach, small or large intestine. Duodenal ulcer receives extensive consideration. The symptoms of perforation as given by Deaver are worthy of careful study.

The review of cholelithiasis includes Aschoff's theory of the formation of gall-stones and Cole's

roentgenographic diagnosis of gall-stones and cholecystitis.

An interesting resumé is that on blood conditions in which splenectomy has proved of value. These conditions are hemolysis icterus, Banti's disease, hypertrophic cirrhosis of the liver, and pernicious anemia. This form of treatment is also discussed under Diseases of the Blood.

A large portion of Gynecology is given to radiotherapy. This includes Roentgen rays, radium, and mesothorium. Remarkable changes, macroscopic and microscopic, are produced in cancer of the uterus and some have been clinically cured. In a large series of uterine myoma a little over half were considered to have been cured by the Roentgen ray.

Under Diseases of the Blood pernicious anemia receives a large amount of attention. The treatment by splenectomy has been mentioned. The transfusion of physiologically unaltered blood is another promising palliative measure. The value of these methods will be proven in time.

Quite a number of articles on benzol in leukemia are reviewed. It is too soon to draw final conclusions. Enough is known to warrant its use, but only with the utmost care.

The recent work on the etiology and treatment of Hodgkin's disease receives extensive consideration. A large amount of experimental work on diabetes is reviewed. Probably the most important clinical advance is the development of practical methods for determining the blood sugar.

Space will not permit of more details. All the reviews are comprehensive and well selected.

GENITO-URINARY DISEASES AND SYPHILIS. By Edgar G. Balneger, M.D., Adjunct Clinical Professor of Genito-Urinary Diseases, Atlanta Medical College; Editor *Journal-Record of Medicine*; Urologist to Westley Memorial Hospital; Genito-Urinary Surgeon to Davis-Fisher Sanatorium; Urologist to Hospital for Nervous Diseases, etc., Atlanta, Ga.; assisted by Omar F. Elder, M.D. *The Wassermann Reaction* by Edgar Paullin, M.D. Second Edition Revised. 527 pages, with 109 illustrations and 5 colored plates. Price, \$5.00 net. E. W. Allen & Co., Atlanta, Ga.

The second edition of this work is made necessary by distinct advances in our knowledge of genito-urinary diseases, and particularly syphilis, and it may be said that the later advances are fairly well covered in the work although we note an entire absence of any reference to the intraspinal treatment, by salvarsanized serum, of locomotor ataxia. Inasmuch as the results by this method are so far superior to the treatment of tabes by the intravenous injection of salvarsan, this forms a distinct discrepancy in the work.

Again, while mention is made of both Rowntree and Geraghty's test, and the complement fixation test for gonorrhea, yet the complete technic of each is not described.

While the book is well illustrated and the subject-matter is fairly complete yet there are an unpardonable number of typographical errors which in time become decidedly annoying. Subsequent editions no doubt will eliminate these undesirable features.

COMMERCIAL ANNOUNCEMENTS, ETC.

Rates for announcements in this department: Fifty words or less, 1 time, \$1.00; 3 times, \$2.50; 6 times, \$5.00.

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Sanitarium and Hotel, on east side of public square park, Spencer, Indiana; well located for traveling public. Just re-modeled. 24 rooms, besides convenient bath house, equipped with 7 solid porcelain bath tubs. Splendid opportunity for physician and hotel man. Terms very reasonable.

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|-------------------------|-------|-----------------------------|--------|
| Calcium sulphide | .059 | Potassium chloride | 2.718 |
| Potassium sulphide | .286 | Sodium chloride | 10.029 |
| Sodium sulphide | .141 | Magnesium chloride ... | .756 |
| Calcium carbonate | 1.834 | Silica | .048 |
| Magnesium carbonate .. | .358 | Ferric oxide | .083 |
| Sodium carbonate | .626 | Alumina oxide, Alumina | .107 |
| Sodium chloride | 1.217 | Hydrogen sulphide 7 cu. in. | |
| | | Carbon dioxide 3.4 cu. in. | |

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logical and pathological examinations, including the Wassermann test for syphilis and the Abderhalden diagnostic test for pregnancy; Lange's colloidal gold differential diagnosis of spinal fluid and the histological diagnosis of pathological tissue. We make autogenous vaccines of all kinds. Sterile outfit with complete directions for the collection of blood will be sent any member of the Indiana State Medical Association free of charge upon request. See our "ad" on page iii of this issue. NATIONAL PATHOLOGICAL LABORATORY, 5 S. Wabash Ave., Chicago, Ill.

FOR SALE—DRUG STORE SITUATED IN PROSPER-

ous, fast-growing residence section of small city in southeast part of Indiana. Store up-to-date and modern in every respect. Ideal for doctor who would like to run a drug store in connection with his practice, as there is no other drug store and no other doctor in that section of city. Proposition will bear closest investigation. Sale price \$2,100 cash or bankable paper. Add. J. F., % THE JOURNAL.

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machines in the state—is in first class order; two tubes staff; motor; high-frequency transformer, fluoroscope and up-to-date electrodes; one 500 candle power leucodescent lamp with screens; one fine oak book case and a number of books. Very cheap for cash. Address or see Dr. J. C. Alexander, 22 E. Vermont St., Indianapolis, Ind.

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Creek Sanitarium? If not, why not? Come and visit us at our expense and acquaint yourself with the many advantages we offer for the care and treatment of chronic invalids. Read our full page "ad" on page xi of this issue. We have prepared a profusely illustrated book of 229 pages, entitled the Battle Creek Sanitarium System which we will send free to any member of the Indiana State Medical Association on request. BATTLE CREEK SANITARIUM, Battle Creek, Mich.

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from \$4,000 to \$5,000 per year, in town of 550 inhabitants, on good railroad, established seventeen years. No competition. Collections good—90 per cent. Reason for selling, poor health. Will sell office equipment if desired. This offer held open for a limited time only. Address "K," % THE JOURNAL.

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enal results attending the use of Radium in arthritis? Let us send you literature and clinical records. Read carefully our "ad." on page x. RADIUM CHEMICAL COMPANY, Pittsburgh, Pa.

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HUNDREDS OF PHYSICIANS TESTIFY TO THE VIR-

tue of the Storm Binder and abdominal supporter which is adapted not only to the use of men and women, but children and babies as well. (See our "ad." page viii.) New folder with testimonials of physicians will be sent on request. Mail orders filled promptly. KATHERINE L. STORM, 1541 Diamond St., Philadelphia, Pa.

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description for the physician. Write C. B., % THE JOURNAL.

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would be obviated if more attention were given to the selection of the right sugar constituent. Our Dextrin-Maltose is a composition of maltose, dextrin and sodium chloride in a percentage which assures easy digestion and assimilation. Our "ad." on page x will interest you. We shall be glad to send literature and samples upon request. MEAD, JOHNSON & Co., Jersey City, N. J.

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the purpose of inspecting our new and complete laboratories. We have a department especially devoted to the scientific study of the action of drugs, and any questions relative to the action of any drug will be given prompt attention if referred to this department. Drop in and pay us a friendly call whenever you happen to be in the city. PITMAN-MOORE COMPANY, Indianapolis, Ind.

WANTED—THE ADDRESS OF EVERY DOCTOR WHO

is interested in purchasing his drugs, instruments, or office equipment at the lowest prices consistent with good quality. Address, THE JOURNAL of the Indiana State Medical Association, 219 West Wayne Street, Ft. Wayne.

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attending the milk supply, from unknown sources by using Horlick's Malted Milk. Horlick's contains clean milk, has a delicious flavor and is easily digested. It is an ideal food not only for infants and young children, but for invalids, aged people and travelers. See our "ad" on page viii.

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OF THE

Indiana State Medical Association

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Next Annual Session, Indianapolis, September 23 and 24, 1915

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NUMBER 10

ORIGINAL ARTICLES

THE CONSERVATION OF HEALTH *

VICTOR C. VAUGHAN, M.D.

President of the American Medical Association

ANN ARBOR, MICH.

Mr. President, Members of the Indiana State Medical Association, Ladies and Gentlemen:

It is with great pleasure that I am here to-night to talk to you. In the first place, I am going to tell you something that doctors have been dreaming about. I will tell it in the form of Dr. Smith's dream—which might just as well be Dr. Brown, but we will call him Dr. Smith.

Dr. Smith is a general practitioner in one of the largest cities in the Northwest. He has spent a great deal of time, money and energy in getting an education. He is a graduate of the university, literary department, and then in medicine. He has studied medicine not only in this country, but abroad. He has been practicing medicine about thirty years; he does not claim to be wise in all things, but he is an all-round general practitioner.

Now, I am going to tell you what happened to Dr. Smith in his practice. One day last November, after breakfast, he went into his office. The first patient that presented himself was Tom Williams. Tom is the son of Judge Williams, who long years ago was the doctor's roommate at college. Tom has been off to school, belonging to one of the rather "fast" fraternities at school. He has just graduated and come back to the town and expects to help his father. The doctor examines him and tells him that he is a walking culture medium of spirochetes; that he cannot drink a glass of water at his father's table without the possibility of infecting his

mother, his father, his brother or his sister; that at best, two years of constant treatment is necessary in order to place him in a normal condition again.

The next patient that the doctor sees after dismissing Tom is a young lady, the daughter of another one of the doctor's old friends. She has a peculiar sore on her lip, which the doctor diagnoses as a chancre, contracted from her fiancé, a young man who occupies an important position in church and social life.

The next patient is another old friend of the doctor, Mr. Gus Holbrook. He has been an honest, upright man, successful in business. His wife is a good provider, and Mr. Holbrook likes the good things of the table. He has noticed for some years that he had rather extraordinary thirst, and the doctor recognizes it as an advanced case of diabetes—hopeless.

The next man is a lawyer who has noticed for some time that he was irritable, conducted his business with marked effort, and was ready to fly into a passion when anything went wrong. High blood-pressure, advanced Bright's disease—hopeless case.

The next patient is a woman with a cancerous tumor on her breast; a major operation is necessary; axillary glands are involved, and even a major operation can only prolong her life.

Then he has two or three cases of advanced tuberculosis. Some of these have already been to brother practitioners and have been told there was nothing the matter with them but a bronchitis.

After seeing a lot of patients in addition to these, Dr. Smith's office hours close, and he goes in his runabout down to the City Hospital. Here is a ward with thirty typhoid patients—some in delirium—all under the influence of a fever which increases in intensity day by day. And why are they here? Because a manufacturing establishment, in order to save a lot of

* An address delivered before the public and the medical profession at the annual session of the Indiana State Medical Association in Lafayette, Sept. 23, 1914.

expense, ran its sewer into the river just above the water-supply. In another room, the lying-in room, there are several girls, seduced in drinking halls furnished with alcoves. The doctor recalls the fact that time will relieve them of the products of conception, but that all time will not relieve them of the stains on their lives.

In a padded cell is a man suffering from delirium tremens, from whisky drank in a gilded saloon owned by one of the aldermen of the city. In another padded cell is a cocaine fiend who has purchased his drug at the drug store of another prominent politician.

In his rounds making his calls that day the doctor meets with many things which tend to cast over him a gloom which is not altogether due to the gray clouds that hang in the November sky. Here is a mother with a little boy nestling in her lap. He has had a sore throat for three days, and she has been treating it with domestic remedies. Examination shows diphtheritic membrane, and the doctor knows that not even the magic curative action of diphtheritic antitoxin can save the child. He gives doses to the other children, but knows it is too late to save the one.

In another house the condition is scarcely less distressing. Some time last summer, while the children were at play on the street, a mongrel cur came along and snapped at one of the children. It was only a scratch; nobody paid any attention to it, and the dog disappeared—and now the child is dying from hydrophobia.

Now, I do not mean to say that Dr. Smith in his rounds that day did not see things which were pleasant. It is given to all of us to suffer more or less, and there is nobody who appreciates more fully than the general practitioner the innate goodness that naturally wells up from the great heart of humanity in the sick-room. We see children denying themselves pleasures in order to take care of their parents; we see parents denying themselves the necessities of life in order to care for their children.

On this special morning of which I speak Dr. Smith had met with a specially sad thing. Two years ago he had become estranged from one of his most intimate families. Dr. Smith had attended at the birth of the five children in this family. One of the boys bore his name, and there could not be a birthday in that house, at least it was not a success, unless Dr. Smith was present. Being unmarried and childless himself, he felt a special interest in these children which he had brought into the world and carried through the little accidents and sicknesses of infancy and childhood. Two years ago Dr.

Smith learned that the eldest of these children, Ethel, a girl of eighteen or nineteen, was engaged to a young man whom he knew to be a syphilitic and a wreck. In a spirit of altruism he went to the father and mother and plead with them to save their daughter—not his. He was bitterly denounced, and the one most bitter in denouncing him for his interference was the mother. Now I ask of you doctors here to-night, suppose you were to undertake such a thing, under such circumstances, would you not expect to be denounced? The parents said, "We know that Tom has sown his wild-oats, but he is wealthy, and he is well connected, and he will make Ethel a good husband." This happened two years ago, and this morning Ethel, feeling the pains of childbirth, and having long regretted her marriage, asked that her old friend, Dr. Smith, should be sent for, and that morning he had delivered her of a syphilitic child.

Now, this is a story. In no case have all these things happened to one doctor in one day. But all these things have happened to many of the doctors before me in the course of a year.

Now on this evening, after such a day's experience, Dr. Smith was sitting before his grate fire, tired in body and in mind, when he fell asleep. And in his sleep he had a wonderful dream. Again it was morning; his office hour came around, and he came into his office. His first patient is a young man who says, "I am thinking of proposing marriage to Mary Jones. Before I do so I want to know that I am sound—sound as a dollar." The doctor put him through as thorough an examination as if he was applying for life insurance of \$100,000.

The next patient is a young girl who says, "Tom Smith wants me to marry him, and I want to know whether I am all right physically or not." The next patient is a woman with a tiny speck on her breast; a little bit is examined under a microscope, carcinoma diagnosed, a little local anesthesia, and the cancerous tissue is removed.

The next is a man who is rather corpulent, about fifty years of age; feels rather loggy. Examination shows a mild glycosuria. A slight change in diet, and he will live to be 80.

Another man has noticed that he is a little irritable, slightly heightened blood-pressure. A change in method of living, and Bright's disease will be escaped. And the doctor remembers that there are 90,000 deaths in the United States each year from Bright's disease alone, and that 70,000 of these deaths could be prevented if the doctors could examine and detect the trouble in time.

So the doctor in his dream is going through this kind of practice, watching people, trying to prevent illness, and he enjoys it. While he is busy in his dream with this kind of practice, he is awakened by the ring of the telephone at his elbow. He picks up the transmitter, someone says, "Come, come quick, quick, to Pat Ryan's, at the corner of Second and Myrtle! Bring your surgical instruments; there has been a cutting affray and the devil is to pay!" And the doctor drops his dreamland practice. The smiles flitting over his face are now replaced by the wrinkles of care, and he goes forth from the land of dreams into the land of reality.

Now, of course this is a story; but there are fifty thousand doctors in this country who are dreaming such dreams, and it is within the power of the people of this country to make these dreams realities. The medical profession has accomplished wonderful things. In the fourteenth century, five hundred years ago, the plague in four short years killed one-fourth of the inhabitants of the then known world. And for three hundred years thereafter, as fast as new people grew up it again swept them out of existence. The average life at that time was less than 20 years. In 1665 the last great epidemic of bubonic plague, or the black plague, swept over England, and the great fire which destroyed London a year later killed the rats, and so far the civilized world has known bubonic plague no more, except now and then, although even to-day it threatens entrance into our country through New Orleans. After the great fire the death-rate in London, and I mention London because it is the only city of the world where there were any statistics kept—the death-rate was seventy per thousand. Out of every thousand people seventy died each year. Sometimes the death-rate ran much higher, depending on the epidemics of small-pox and typhus fever.

In 1796 a country doctor, Edward Jenner by name, having heard it rumored about that one who had cow-pox could not have small-pox, inoculated a boy with cow-pox, and some weeks later inoculated the same boy with small-pox, and the boy had no sign of the disease. During the next five years Edward Jenner and his assistants inoculated more than five thousand people, first with cow-pox and then with small-pox, and in no case did small-pox take. You have heard of antivivisectionists, have you not? They come to me and say, "You are experimenting with guinea-pigs, and you are killing rats!" etc. Remember that Edward Jenner and his associates carried out an experiment involving five thousand people—not rats, not guinea-pigs—people!

The historian Macaulay says that before Edward Jenner's discovery it was unusual to meet on the streets of London one whose face was not marked with small-pox. Now each one of you in this audience turn and look into the face of your wife, your sister, your mother, or your daughter. Why is it not marked with small-pox? Because Edward Jenner discovered vaccination and small-pox has practically been eliminated. But still to-day, after more than one hundred years, the state of Indiana spends thousands of dollars (I dare say Dr. Hurty can tell us just how much) every year in taking care of a lot of fools who do not know enough to be vaccinated. (Applause.)

In England, where this discovery was made, they have vaccination or no vaccination, according to local option. A community decides whether it will have compulsory vaccination or not, and a very strange thing happened, so strange that it does seem that Fate must have had a hand in it. On the anniversary year of the discovery of vaccination, in the little town in which Edward Jenner lived and made his first experiment on the Phipps boy in 1796—in Gloucester, in 1896, having some years previous decided not to have any vaccination, in the old town of Gloucester there was an epidemic of small-pox with eighteen hundred deaths, and every gravestone was a diadem in the crown of Edward Jenner. (Applause.) The leader of the antivaccination society, in the midst of it hurried off to London and was vaccinated.

The work of John Howard in the alms houses, prisons, workhouses and other homes of crowded filth practically did away with typhus fever. So that while the death-rate in London in the early part of the eighteenth century was seventy per thousand, to-day it is a little less than fourteen per thousand.

Take our own country, right here at home. The first life statistics of the United States that have any value at all were those of 1880. In 1880 the death-rate in the United States was practically twenty per thousand; to-day it is a little less than fourteen. In 1880, fifty-four children out of every one hundred thousand people in the United States died every year from scarlet fever; to-day the death-rate from scarlet fever is one-ninth of what it was in 1880. The death-rate from tuberculosis has been decreased 54 per cent. in this country over what it was in 1880. The death-rate from typhoid fever and from diphtheria and other infectious diseases has been reduced likewise. In 1880 the average human life in the United States was between 33 and 35 years; to-day it is 50 years. We some-

times see the statement that the increase in the average life has been accomplished by reducing the infantile mortality. It is not true. At every age between the first and fifty the average life has been increased. The man of 50 to-day is younger, so far as effectiveness is concerned, than his father was at 30. Nay, more than that, my friends. If the people of the United States were to-morrow to put into effect the principles of sanitation which the doctors assembled here in Lafayette might write out, within a few years the average life in Indiana, and in the United States, would be 65 years—65 years.

Why do we not do these things? Why do we not do them? Just let me put it in a little different way. Because of the stupidity—there is no other word for it—stupidity, of the mass of the people, the average, the average life among us is fifteen years less than it ought to be. Now there are, roughly speaking, one hundred millions of people in the United States, and each one of these hundred million people on an average will live fifteen years less than they might live under better hygienic conditions. I mean that the ignorance of the masses, that the activities of Christian Science, and the League for Medical Freedom, and others opposed to the progress of science, are costing this generation one billion, five hundred million years of human life! That is a conservative way to estimate it. The average mortality rate in Indiana is about fourteen per thousand. What was the average mortality rate in the Canal Zone before taken hold of by the United States government—the most pestilential region on earth, where thousands and tens of thousands of French left their bones to testify to the deadly infection of yellow fever and malaria? What is the death-rate there? Seven per thousand. And the most of the employees in the Canal Zone were colored people, and the deaths among the colored people in the United States are more than twice those among the white people. Sanitation has made the Canal Zone, known ever since the day that Balboa saw it for the first time as a charnel house of trade and commerce—sanitation has made of it a much healthier locality than the banks of the Wabash.

Mr. Hoffman, the very able and distinguished statistician of the Prudential Life Insurance Company, has shown that if the death-rate from tuberculosis that did prevail in this country in 1901 had continued through the ten years following, the number of deaths from tuberculosis in this country would have been 200,000 more than actually did occur. In other words, the saving of life from death from tuberculosis alone

averaged 20,000 a year. Now a battle in which 20,000 are slain thrills the world at the time. There is no proof as yet that in any one battle in the great European war now going on 20,000 have been slain. I say a battle in which 20,000 are slain thrills the world at the time—fills pages of history in the future. Preventive medicine has saved 20,000 lives a year from death from one disease. Is this a small achievement? Is this something that is not worth doing? The average life of the consumptive is 35 years, and Mr. Hoffman calculates that these 200,000 people saved from tuberculosis in that decennium will have an aggregate life of 6,200,000 years—that would have been cut off had the previous death-rate for tuberculosis continued.

Now, my Christian friends, the battle against disease is no doctors' battle. It is a community, a state, it is a national problem. It is no more the business of the doctor to prevent disease than it is the business of the lawyer, the banker, the business man, whatever his business may be. No profession, however great it may be, can do this work unaided. There is only one way in which our nation can be made strong and vigorous and long-lived and made the best on earth, and that is by the united effort of all. It is the only way to do it.

It is exceedingly gratifying to know that we have reduced the death-rate from tuberculosis by more than half within the last thirty years, and the greater part has been within the last ten years. But let us not delude ourselves; let us not make a mistake. We are not going to get rid of the next half of tuberculosis in thirty years more. That is a gray horse of another color. So far in the crusade against tuberculosis, only the more enlightened members of the medical profession have participated. In fact, many have held back in this work. In the work that has been done only the enlightened people of the community have participated; the great mass have not. Only the people who have gone to the doctor early enough to be examined while tuberculosis is still a curable disease. The other great half is the submerged half, the ignorant half. They will not go to the doctor. No! They will continue to walk your streets and spread the seeds of their disease in their sputum on your sidewalks; they will be found in your churches, in your schools, in your theaters, in all your places of congregation, scattering the seeds of disease. Now we have to go to these people. We have to lay hold of them. Some of them are so poor that they cannot come. Do you know that? Do you know that in this country, overflowing with wealth and prosperity, there are people too

poor to even deny themselves a few short hours to be taken from labor to attend to their health? The doctor knows that, whether the rest of you know it or not. There are many of them too ignorant to attend to the matter. Now, let us go to these people: to those who are in poverty, let us carry material aid; to those who are in ignorance, let us carry the light of knowledge.

No tree can be healthy or continue to bear good fruit so long as some of its roots are diseased. "No man liveth to himself." No community can be whole itself as long as we have transmissible disease in our midst. While great things have been done in the reduction of the death-rate from infectious diseases, and while we are at peace with the world, and while we are enjoying prosperity, there are two malignant growths that are eating our vitals. Will we recognize them, submit to the surgeon's knife, and have them removed? Or will we say that all is well and go on?

While the death-rate from transmissible diseases and infectious diseases has been reduced, degeneracy in the form of feeble-mindedness is growing at a rapid pace among us. It has been shown by carefully collected statistics in New Jersey—and I have no doubt the same is true all over the land—that out of every 500 people there is one feeble-minded individual, and that at the rate at which they are multiplying only fifty years will go by before there will be one for every 250.

And what are we doing about it. Very little; nothing. But I doubt very much, my dear friends, whether feeble-mindedness, growing as fast as it is among us—I doubt very much whether it is the greater peril of the two—the other cancer that is eating at our vitals—that of greed for commercial gain.

Let us get down to facts. How much do you people here in Lafayette pay for fire protection? Do you have any idea? I dare say that you pay, judging from other cities where I have been, that you are paying from 75 cents to \$1 per inhabitant for fire protection. What are you paying for life protection? What do you pay your health officer? What do you pay to have some one look after your milk-supply and your water-supply, and the infectious diseases that exist among you? Does anyone in this room know? I am asking for information. What is the per capita tax in Lafayette for life and health protection? What do you pay your health officer? Anybody tell me?

Some one says 1½ cents—for life and health protection. That is about what I thought it would be; I should have guessed 2 cents.

Now let me tell you, we cannot be strong and vigorous as long as this is the case. I want to say to the lay part of this audience—the doctors need not listen to it. I am not in the active practice of medicine now; I am through with it. I want to say, however, that when I began the active practice of medicine at Ann Arbor along in 1879 or 1880, to tell the truth I do not know how I could have lived without typhoid fever. I think I would have starved to death without typhoid fever. There was one old well that used to furnish me every summer from twenty-five to thirty cases of typhoid fever. And typhoid fever is a disease that pays the doctor pretty well.

People who are sick with typhoid fever think they are very sick, and it lasts a long time, and they want the doctor to call just as frequently as possible, and it amounts to quite a little. The first two or three years of my practice in Ann Arbor I am sure that typhoid fever was worth from \$2,000 to \$3,000 a year to me, and I could not have lived without it. Finally, I got the health officer, and we went around and put a padlock and chain on the pump in that well, but in the morning I happened to be out early seeing some patients in that neighborhood, and what did I see but people lifting the boards over the well and lowering their pails and lifting out the water; and I said, "More typhoid fever for me." And then we went and dumped a barrel of tar into the well, and after that they had to stop drinking it, and they said all kind of mean things about the doctors who wanted a water-supply put in; but in 1884 we got a water-supply, and typhoid fever since that time in Ann Arbor has not brought me \$100.

Now, this is no exaggerated statement, and this is no isolated case. A year or two ago I was at a dinner in Cincinnati, and the subject of typhoid fever came up. There were lawyers, doctors and various kinds of men at the dinner, and I made the statement that I dare say the purification of the water-supply of Cincinnati had lessened the income of every general practitioner in the city. Dr. Florsheimer happened to be present, and one of the leading men said, "Dr. Florsheimer, what did you make out of typhoid fever, compared with what you make now?" He said typhoid fever had been worth \$6,000 a year to him, and he lost the whole of it with the introduction of a water-supply.

Now, when I go about the country and talk to such audiences as this, and tell you that the American Medical Association, composed of 50,000 or more doctors in this country, each one paying \$5 a year—that this Association is spending out of its income \$50,000 a year to try to

teach the people of this country how not to be ill—there is a kind of look of incredulity on the faces of half of you now. People say there must be a “nigger in the woodpile” somewhere, that the medical profession should strive to reduce illness, for it is thereby they make their living. I will acknowledge the doctor is a queer beast, but his mission in life is not to accumulate any great wealth, but to eradicate disease, and that alone will make him happy. I deny most emphatically that money is the strongest motive that moves the mass of mankind. I will admit that anything that requires money is not easily accomplished, but a good lawyer, if you will go to him with your ease, will advise you in the majority of instances not to litigate, and a good preacher will try to save your soul before it gets past saving; and the good doctor rejoices much when he can keep you well.

Now, what is to be done? I want to make my talk to-night just as practical as possible. In the last legislature of the state of Indiana—and in Michigan also, and in a number of other states—there was a bill introduced providing for a full-time health officer in every county. It did not pass, either in Michigan or Indiana. The governor of our state, a man very liberal and very up to date, shyed at that bill. He said: “Why, Dr. Vaughan, do you know what that is going to cost the state of Michigan to put a full-time health officer in every county?” I said, Yes, I can tell you. It will cost \$260,000 a year. “Well,” he said, “the people will never stand it.” I said, Do you know how much it means? It means about 15 cents for every inhabitant of Michigan; that is what it means. And I said, Do you know what we are paying for tuberculosis alone? A million and a half a year. That is, if you say that the women and children are worth absolutely nothing in dollars and cents, and that the adult deaths in Michigan—I do not know about Indiana, I suppose it is about the same—the adult deaths of males over 21 years of age who die from tuberculosis in Michigan, supposing that the average income of each one was only \$100 over and above enough to keep him, are costing the state of Michigan over a million and a half a year on account of tuberculosis—and still they will shy at \$260,000 a year to prevent, not only tuberculosis, but other diseases as well.

Now, it is up to the people of this country whether or not we are going to free ourselves from disease and from the other bad things that go with disease. Crime to a large extent is due to disease; poverty is due to disease. There is a whole train of ills that come as a result of

disease. We have in Michigan—I do not know about Indiana—but according to the best computation in Michigan we have 9,000 potential criminals at large in the state, people who are in a state of mind that if they should commit murder to-morrow no one would be surprised. We boast of our civilization. We say we are the greatest people the sun ever shone on—and I guess that is about right; I hope it is. But I will tell you, my dear friends, we are a long way from anything like real civilization. We are barbarians yet. The future historian will have no difficulty at all in convincing his readers that we who lived in this old country at the beginning of the twentieth century were barbarians, when he tells of our high death-rate, and when he tells—now listen—that the United States of America in the year 1914 a murder was committed for every hour, day and night, in the year! Not an hour passes, the clock never strikes, but what on an average a murder has been committed in the United States. Ten thousand murders a year! Ten thousand! More, you see, than one for each hour, day and night. Can we boast of civilization as long as that statement is true? And according to Judge Weir, only two out of 100 murders are ever punished for it. And no less an authority than ex-President Taft is responsible for the statement, not only that crime is more prevalent in this country than in any other civilized country of the world, but any other savage country. We boast of our civilization, and we have people here in Lafayette who could not live twenty-four hours in a tribe of savages; they would be stoned to death. Suppose a man in a tribe of savages would steal another's blanket. What would happen? How many people in Lafayette are stealing and robbing by excessive charges? How many are adulterating food products?

I say there are two malignant growths feeding at our vitals. One is feeble-mindedness among certain classes, and the other is the greed that would sell us “patent medicines” carrying poison, that would sell us adulterated food, that would sell us filthy food.

Now, every medical man renders a service to his patients. He renders a higher service to the community. Dr. Jones is treating a case of diphtheria down here. He is doing all he can for his diphtheria patient, but he is doing a greater service to the public in preventing the spread of diphtheria.

I am not going to weary you. I am half crazy on this subject myself, and when I get started I do not know when to stop. But I want to say that I hope when the next legislatures—Indiana.

Michigan, Kentucky, Ohio and some other states—come together, we will have a full-time health officer in every densely populated county of each of these states, and that he will make it his business to find out every case of transmissible disease, every case of feeble-mindedness, every case where the individual or the family is a danger to the community. And if medicine is to render its highest service to mankind, the time must come when every individual will be examined once or twice a year to find out whether they are well. And this examination must be paid for by the state, because it is for the public good that it is to be done.

I know we are all patriotic enough to do what in us lies to make of this American people the greatest nation on earth. It is not to be done by money; it is not to be done by a remedy. It is to be done, if done at all, by the evolution of the better man, the man who will come into this world free from every inherited defect, who will grow into maturity uncrippled by disease, and who will spend his life in the promotion of the welfare of all. I thank you. (Applause.)

THE FAMILY DOCTOR

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I am inclined to believe that the honor of being the first family doctor belongs to Mother Eve, for she, no doubt, tried many remedies on herself and family to overcome the baneful results of eating green apples. She was also the first investigator to grasp for the philosopher's stone, through which she, like so many others since, hoped to gain perpetual health and life. She was, however, more sincere in her convictions than some doctors of our day, for she first tried the remedy on herself before "she gave unto Adam to eat also."

In this connection I am reminded of a more prudent man I once knew, who was the victim of trichinophobia, and who in confidence told me that each year after butchering time he refrained from eating any of the pork until his wife and family had partaken of it long enough to prove that it contained no trichinae; after which he felt safe in making up for lost time.

From the distant, hazy past when the Centaur Chiron and his pupil Esculapius ministered to young Jason and on from the morn that dawned on the scientific researches of Hippocrates, the science of medicine has gradually gained strength, favor and influence, until to-day, stripped

of its mysteries and dogmas, it commands the admiration of the world, and is one of the great factors of our civilization. Progress, especially in the beginning, was slow, but every onward step has been made by the most determined, indefatigable and self-sacrificing labors. It was as late as 1616 that Harvey discovered the circulation of the blood, and 1798 when Jenner inaugurated the practice of inoculation that is ever becoming more efficacious and far reaching.

To be the family doctor is a stewardship most serious, responsible and honorable, and should foster the most painstaking, vigilant and constant efforts of every conscientious physician. He should be polite, prudent and honest and must not give offense by being abrupt or brusque when in a hurry or fatigued. While he must possess a certain amount of dignity, he must not be dignified or aristocratic. He should take an active part in everything that may have an elevating influence on the community in which he lives, especially in matters pertaining to the public health and morality.

In these days of specialism, commercialism and patent medicines, the family doctor labors under disadvantages that did not so much disturb his predecessors and his path is constantly becoming more narrow and beset by new and unexpected restrictions; yet he is engaged in the same beneficent mission, but with larger opportunities for improvement, investigation and usefulness.

It seems strange that in this democratic and cosmopolitan America the struggle for wealth and exalted positions should be so assiduously fought for, even at the sacrifice of honor, culture and character. It seems a shame that money buys friends and favors and is often accepted as a sufficient apology for stupidity, ignorance and professional quackery. Courteous rivalry is commendable, and competitive practice does not compel enmity, but unfortunately there are some in the profession who will stoop so low as to attempt to steal another's practice, and by hook or by crook, prejudice his patients against him. There are not enough suitable words in the dictionary to properly condemn the interloper who surreptitiously tries to force an entrance into his competitor's families.

The honor of the medical profession has been built up, and can be maintained only, by men of honor; men of principle and conscience, loyal to its purposes and ideals. It is quite as important to think of what we should give to the profession, as it is of what we hope to get out of it. There is no need of an elaborate code of ethics; the Golden Rule is all-sufficient for every emergency.

and is so easily memorized that there can be no ground for pleading ignorance.

The family doctor, more than any other person, is entrusted with the confidences of his patrons. He has seen the skeleton that hangs in many a family closet, and has been led into the most sacred and secret passages of the family life, yet he must be a safe repository and dare not violate his trust. It has been truly said: "If people realized the debt which they owe to their physician, if they fully realized that the life which he must lead to administer to the sick in body, and to the sick in soul, they would doubtless be more ready in meeting his charges and sometimes help him in his ministry for good."

It is strange that there seems to be so much ingratitude displayed for services rendered when the time comes to pay. Men will pay the specialist a large fee without a quibble and let the family doctor wait. They will pay their lawyer promptly and uncomplainingly for a material defense, but when the family doctor at great sacrifices to himself has saved a precious life, too often are his labors and successes soon forgotten and his just claim remains unpaid. Strange that the same patron will pay the cash to some knave that holds him up for a large sum by the practice of rank quackery, and that so many habitual delinquents seem to have plenty of money for the pleasures of life and the follies of fashion, but little for the faithful family doctor.

The family doctor should be conservative. Materialism leads to selfishness and egotism; and while a man should not underestimate his importance he dare not be puffed up with pretentiousness. We all wish to be happy and successful, but these are relative terms and do not necessarily originate from the same impulses. On one side we have the materialistic view of success, where money is the dominant force; on the other, the psychological—the mental force—an overwhelming desire to be useful and helpful to others, even at a sacrifice to self. We will, therefore, travel best in the center of the path, with a kindly feeling for others, and at the same time a determination to preserve virtue, manhood and self-respect. Neither dare he be an optimist or a pessimist, which are extremists in both directions, but he should try to follow an intermediate course in sturdiness and honesty. Every physician who accomplishes anything of worth must have high ideals, an ambition to rise and a faith in himself.

The family doctor should avoid all entanglements and controversies. He dare not dabble in politics or engage in religious contentions. He

should not consent to be a judge in a contest of any kind: for while the winner may be pleased the losers are apt to remember it against him. He will not make his visits to the patient more often than is necessary simply to increase the amount of his bill: because every useless call is a dishonest act and practically amounts to a theft. He will be generous to the needy poor. It has been said that there are three kinds of poor: "the Lord's poor, the devil's poor and the poor devils." While experience will soon teach the advisability of keeping out of reach of the devil's poor, the first and last mentioned should have the consideration they deserve. They are usually unfortunate and appreciate a kind act more than many another from whom you expect consideration.

The physician who is appointed by the county officials to attend the poor and who accepts the contract at his own figures usually does the least of this "poor practice." He generally finds many ways and excuses to avoid it.

While the family doctor is always interested in the affairs of the family, he should be wary lest he be inveigled into taking sides in any of their kinship quarrels. It is very easy to make an enemy by even apparently being partial, and the least word of censure or approval may be used to his disadvantage and cause both sides to be offended at him. As a rule, neither side is without prejudice and even if the truth, both pro and con, were known, it would take a Solomon to make the proper disposition of the case.

The family doctor should disparage the use of any of the various medical guide books on home treatment by the family. They are, at best, of doubtful value and often a menace to the healthfulness of the family. The diagnosis of a case is the basis of treatment and the foundation on which all successful therapeutics must be erected, and requires more diligent study and more practical experience than any other department of the healing art: and how anyone without this fundamental knowledge and experience can expect to find the proper remedy in his book of instructions, unless he has discovered the underlying ailment and can reason from cause to effect, is beyond my comprehension.

There are some officious persons who have just enough knowledge of medicine to make them dangerous, and in some cases, where energetic means are required at the very outset of the disease, valuable time is lost, permanent injury sustained or even life sacrificed by depending on the persistent use of home remedies or through the suggestions of someone who is filled with imaginary wisdom.

In making a diagnosis it is desirable to be discrete in asking delicate questions in the presence of other members of the family that might shock the modesty or tend to expose a secret, especially if the patient be a young or sensitive female. It is also well to bear in mind that on the environment and manner of putting the questions depends the truthfulness of the answer given, and it requires much experience and tactfulness, when summing up the verbal evidence, to know how much you will not believe.

In examining his patient the family doctor should proceed with the utmost patience and kindness. While the specialist can be cold, unsympathetic and technical, the family doctor must treat his patient as a friend who has placed the utmost confidence in him and is willing to submit his well-being and perhaps his life into his keeping. It is well to listen patiently to the extraneous details and to the often befogging history given by an anxious mother, or by an officious attendant, even while taking the subjective history of the case, but when you are taking up the objective points with the patient, nothing should interrupt your attempts at reaching a logical conclusion. The thoughts should not be allowed to drift from the patient until the diagnosis is completed and a course of treatment decided on.

Homer said that Odysseus, who had come in contact with many men in many places, "knew the minds of many men," and in like manner the family doctor has learned to know the most of his patients. He has known many of them since they were babies, and knows their dispositions and predispositions, their idiosyncrasies and prejudices, their habits and hobbies, their tendencies and want of resistance, and can treat them with more judgment and discretion than can a stranger. It has been said that medicine "as a theoretical science rests on observation; as a practical science it rests on the knowledge acquired."

Nervous maladies—those undefinable evils which our civilization is developing, are the most disappointing and distressing calamities that enter into the family doctor's experiences, and in these cases the advice of Luke the Apostle-physician of the first century—comes with great force and appropriateness when he says: "In your patience possess ye your souls," for it seems impossible to conceive of anything more trying and requiring more patience and tact in retaining the family, than his experience with these victims of neurasthenia, hysteria, epilepsy and the like.

The family doctor must always be guarded in his prognosis. The termination of disease depends on so many circumstances that it often becomes impossible to foretell the duration or the outcome of many cases. As long as medicine is not an exact science we may expect possibilities to become probabilities, and probabilities to develop into facts which cannot be foreseen; indeed some apparently very simple ailments suddenly become complicated and bring on the most unexpected results. On the other hand, individual resistance is so varied that some of the most desperate cases will recover in spite of the family doctor.

It is well not to exaggerate any symptom or physical defect that may be discovered. Nervous persons may be greatly injured by calling attention to any organ that may seem to be in a slightly abnormal condition. The internal organs are sometimes seriously deranged, yet quickly recuperate, and it is cruel to direct the mind of the patient unduly regarding functional disturbances. Even organic affections do not always shorten life and many an impressionable person is made forever miserable by the doctor who has grossly exaggerated physical conditions. If this be the result of ignorance or a faulty diagnosis, the mistake is, in a degree, pardonable, but if the sufferer was purposely terrified through monetary considerations, the culprit, like Haman, deserves to be hung on a gallows fifty cubits high.

The doctor who is acquainted with the family will not take offense at anything a sick person or a very sympathetic friend may say, for frequently they are not altogether responsible for either their words or for their acts. He also knows who is the dominant character in the family, and will govern himself accordingly; nor will he take umbrage if Auntie or Grandma suggests some home remedy, for she, no doubt, means well and will be pleased if she and her "remedy" receive due consideration. You can't afford to ignore or offend her as long as she recommends something reasonable and harmless. You know "Hell hath no fury like a woman scorned." The ancient Roman Furies and the Erinyes—the trouble-makers of Greek mythology—are not yet extinct, but work in a more insidious manner in these days of prudent malignity.

It is well to keep on good terms with the children; remember their names and peculiarities and the little incidents that are pleasant to recall, for it will be a great help when called to attend one of the little fellows, both in making the

examination and in the administration of the remedies.

A consultation should not be advised unless it is expected that the patient derive some benefit; and it is not an honest act to suggest Dr. X simply because you expect him to confirm your diagnosis and treatment. Get someone in whom *you* have confidence and with whom you can review the whole case carefully and intelligently with the hope of doing something for the relief of the sufferer.

The family doctor is often called on to do something in the way of surgery and he should be able to perform all minor operations with some degree of skill and dispatch. As some mechanical dexterity is always necessary, he should devote part of his spare time to tool using, drawing, painting, practice on musical instruments or mechanical construction in order that his eyes may be ever alert, his hands steady and dexterous and capable of obeying the directions of his mind. A surgeon who has no mechanical ability is a failure.

Finally, the family doctor must keep up with the progress of the times. He must know what is going on in the line of investigation and improved methods of treatment. He must procure new text-books at frequent intervals, take several prominent medical journals and be a member of his local and state society. He should have a microscope and other accessories necessary to make his diagnosis as complete as possible. If he attends to his business and to the advancement of his abilities as he should, he will find no time to loaf and will never die of ennui.

FEDERAL CONTROL AND PREVENTION OF TUBERCULOSIS *

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As a prelude to the consideration of my subject I wish to call attention to and if possible emphasize certain facts which must have an important bearing on all discussions of the subject.

1. That tuberculosis is very infectious. That every consumptive is a source of danger to every susceptible person with whom he or she comes in contact.

2. That everything that tends to lower the vital powers, such as insufficient food, bad hous-

ing, overwork, intemperance, overcrowding, insufficient clothing, irregular hours, mental worry, in fact anything that disturbs the equilibrium between waste and repair, predisposes to infection. Of these, perhaps insufficient or improper food ranks first, and dark, ill-ventilated and damp houses next.

3. The disease once contracted is almost always necessarily fatal. Above its portals may well be written, "Abandon hope all who enter here."

4. Up to the present time there is no specific remedy for the disease, or any certain prospects that there will be in the near future.

5. From an economic point of view, it costs the civilized nations of the world more in the loss of life and money than all other pestilential agencies combined, perhaps war included.

The first proposition can be dismissed without question. The contagiousness of the disease is now recognized by all authorities on the subject.

The second proposition is, I think, fully as well recognized as true. Vital statistics show conclusively that the hot-beds of the disease are ever found in the overcrowded, insanitary tenement districts, among the overworked and underfed members of the working class. Enslaved by a faulty industrial system, compelled to live on wages below the cost of reasonable living, subjected to all the depressing influences of poverty, these people fall a prey to the disease by the thousands, and, circulating unrestrained, carry the infection to thousands of other people in the more favored walks of life, and were it not that a large portion of the human family are immune to the disease it would have depopulated the earth long ago.

The third proposition, I think, is equally well sustained by facts. And I wish to say in this connection that in thirty years' practice I have never seen a case in which the diagnosis of tuberculosis was positively made get well. I have seen the disease arrested and an apparent return to health in several instances, but these patients sooner or later went to pieces again, and died of the disease. Dr. Webb of Colorado Springs, after thirteen years' experience in sanitarium work, gives it as his opinion that very few really get well. He says that in all the sanitariums of Europe these people have a low opsonic index and that you can't get it up, and it is the same in Colorado. Speaking further, he says, "We have dozens of cases in Colorado cured, but if they go East they will break down again." The point I want to make is that very few if any of these

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cases ever really are cured. The disease is arrested, but the smoldering fire is still there ready to be rekindled by any indiscretion on the part of the patient. Sooner or later they all die of their disease.

As to the fourth proposition, the report of the Committee on Tuberculosis at the last session of the Indiana State Medical Association is emphatic in its declaration that as yet no specific remedy is in use or that there is any prospect that there will be in the near future. The consensus of expert opinion to-day is that the treatment of the disease consists of four essential items, viz.: rest, food, sunshine and fresh air, judiciously managed.

In support of the fifth proposition that the disease in question costs more than all other pestilential agencies combined I submit the following figures from reliable sources.

From a paper read before the Indiana State Medical Association in 1907 Dr. Jonas Stewart says, "There are annually one hundred and fifty thousand deaths from this disease in the United States alone." Huber places the annual loss from this disease in the world at five millions. Another writer estimates the deaths from all the wars in the nineteenth century at fourteen million, and the deaths from this disease in the same countries at thirty millions, more than twice the number lost in war.

Estimates vary as to the proportion of deaths in this country from consumption. From the report of the committee on tuberculosis of the Indiana State Medical Association for 1904 we learn that one-seventh of all the deaths in this country are charged to tuberculosis, and an estimate based on the census report gave the number of persons in this country infected with tuberculosis at one million and fifty thousand. The report of the committee on tuberculosis in Ohio for the same year gave the number of deaths in that state at six thousand annually.

The reports of the Indiana State Board of Health show an average loss of life of about four and a half thousand per year, with an annual cost to the state of above eleven millions of dollars, and leaving more than a thousand orphans under twelve years of age. Biggs estimates that New York City loses twenty-three millions of dollars annually and the United States three hundred and thirty millions annually from tuberculosis. If Biggs' figures are correct, then Indiana's proportion is eleven million six hundred and sixty thousand dollars annually.

I have dwelt on these items with a view, if possible, of awakening a keener interest in what follows. The enormous loss of life and treasure appalls us. It is evident that present methods of dealing with the disease are entirely inadequate to control it or even prevent its increase. We sometimes flatter ourselves that with a few sanatoriums scattered here and there we are doing much toward conquering this fell destroyer of the race, but in fact we are doing nothing, or practically nothing. In order to check the ravages of consumption the Federal government must take hold. Three hundred and thirty million dollars, the estimated annual loss of the nation from tuberculosis, can be stopped only by stamping out the disease. This means that every case must be cared for and the people must be aroused to the danger and necessity of protecting their homes and their families from this lurking foe to health and life.

The medical profession, unsupported as it is by the general public, is now unable to cope with this enemy of mankind with any degree of success. Nor will we have a fighting chance until the nation is awakened to a full and complete understanding of the gravity of the situation.

In order to do this the medical profession must meet the situation fearlessly and honestly and send out warning, in no uncertain tones, that consumption means death and untold suffering; that it cannot be cured. And let the public fully understand that every case of consumption that is traveling around and mingling with the people is a source of danger to every one with whom he or she may come in contact. This leads us to consider what is necessary, and why it is so, to control and prevent the spread of the disease.

1. Strict quarantine of every case until at least a bacteriological test shows that it is free of the bacilli.

2. Ample buildings and parks must be established to provide for the comfort and care of all infected people.

3. The consumption camps or sanatoriums must be made so attractive that they will be sought rather than avoided by the consumptive.

4. Each camp or sanatorium must be under the supervision of a competent medical staff, with ample means for the study of the cases and the employment of the most scientific treatment of the disease.

5. Recognizing the fact that this is a national and not a local subject, we should have full and

complete federal inspection of all mines, factories and workshops where people and children are compelled to work, and a strict standard of sanitation to which they shall all conform.

6. We should have strict federal inspection of all tenement property, and a standard of sanitation to which all must conform.

7. Strict medical inspection of all foreign immigrants, and the rejection of all who may be affected with any contagious disease, and,

8. Perhaps the most important of all laws, absolutely prohibiting overcrowding in any habitation in the country.

With the adoption of such a plan as outlined I believe it would be possible practically to stamp out the disease within the lifetime of the next generation. But eternal vigilance along these lines will ever be the price of life.

I am fully aware that the contentions in this paper, and especially the doctrine of federal control, will be subjected to many criticisms, but I am certain that my plan is or will be the only way by which the emergency will be met and the desired end accomplished. The counties, towns, or even the states, cannot handle the task. In Indiana we have been at work along the usual lines for ten or twelve years and to-day we cannot give scientific treatment to one-twentieth part of our consumptives. Not one in fifty of our consumptives can meet the expense of a private institution, and the capacity of the state institutions will not accommodate more than one out of every hundred. Then again, it would be much more expensive for the individual states and counties to do the work, even if they could.

What we need is a federal department of public health, with full and complete power to act, and an appropriation of money sufficient to carry on the work. Private capital and private enterprise failed to build the Panama Canal, but the United States Government did build it and at the same time transformed a region said to be uninhabitable into one of the most salubrious spots in the world. What the government did in stamping out tropical diseases in Panama can be done in stamping out consumption in the United States. Then in the interest of suffering humanity, for the protection of the home and fireside, for the sake of thirty millions of orphans made such each year by this disease, to say nothing of the enormous money loss, let us go to work in earnest to arouse a sleeping nation to a realization of its danger and its duty.

A PROTEST AGAINST COMMERCIALISM IN MEDICINE

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When a canker attacks an organism it must needs decay unless the infection be counteracted by timely and judicious efforts.

The canker of commercialism has attacked the medical profession, and its baneful effects are very manifest. It behooves those who stand for the better things of the profession to stay, if possible, its destructive processes.

Time was when ours was a noble profession and will be such again if we can stifle this commercial spirit which now pervades its ranks. For centuries the medical profession has had great influence on the thoughts and feelings of mankind; but latterly it is losing its former hold on the confidence, respect and affection of the people. This loss of prestige and confidence is seen in many directions. Witness the large following of the blatant charlatan—of the osteopaths and other fakers. Note also the vast number of believers in Christian Science and other fads. Anything but straight legitimate medicine is now the desideratum. The inane mouthings of the faker and the ignorant swindler have more weight with the rabble—the majority—than the teachings and advice of honest, disinterested men actuated by altruistic motives.

As another proof of our lost esteem, see what little importance the people attach to the title of "Doctor." The title of "Doctor of Medicine" should be a guarantee both of honor and ability. Alas, it is so no longer. When the new doctor moves to town he is viewed with suspicion by the citizens, and must convince them, by making good, that he is honest, before they will lend him—money. They are also a little "shy" of bestowing much patronage on him for a few days. The only consideration shown him is, he is permitted to take the rest cure. In fact, he is *persona non grata* until he presents acceptable credentials.

Now, what are the causes of this changed attitude on the part of the people toward the medical profession? Do the causes lie with us or with them? With both—with them in part—with us in part. So long as medicine was hedged about by the occult, the magical, the mysterious, and all knowledge of it was esoteric, people regarded it with more or less awe; but now that it has come out in the open, discarded its mask, its limitations seen and acknowledged, it no longer

compels a blind and credulous following. All this notwithstanding, we are more competent and better equipped now than ever before to serve suffering humanity.

Sanitary science has taught the people what to do to be healthy, and that it is easier to prevent than to cure disease; and this has made them less dependent on physicians. Patent and proprietary medicines have done much to lead people away from us. The literature circulated to exploit these nostrums is calculated to weaken confidence in us, and at the same time teaches the laity the art of self-medication. Other causes have operated to weaken the faith of the public in the curative powers of medicine. Homeopathy taught the more thoughtful to argue that if the sick could recover under infinitesimal doses they might possibly get well without any medicine whatever.

The less thoughtful became more and more estranged as medicine grew nearer an exact science; for the ignorant are not yet emancipated from the superstitions which have from time immemorial attended the healing art. They think that without some *hocus-pocus*—some *hoodooism*—attending the administration of drugs, the results will be negative.

So much for the extrinsic causes of our decadence. Now let us turn our eyes within and see if we, ourselves, are without fault. Let us take stock, and be sure to attribute our present status, in part to our cupidity—to our commercialism.

Formerly the medical ranks were recruited from the sons of high-toned, honorable fathers, who prized honor above everything else. These young men possessed high ideals, lofty purposes and laudable ambition, and were an honor to the profession. But latterly too many sons of "get-rich-quick" fathers who made their money through questionable methods, and who care nothing for honor, seek a medical career. The motto: "Get money, honestly if you can, but get money," has been held up to them from early infancy as the proper one for their guidance. With such vicious training, being so fathered and so disciplined, a moral obliquity is certain to manifest itself in professional life—they are already commercialized. Nothing in medicine but its commercial side appeals to them.

I do not arraign our whole profession—far from it—that would be unjust. A whole profession is no more indictable than a whole people. The honest, sincere members enable it to command universal respect.

The church is not condemned in toto because some of its members are liars, thieves and hypo-

crites. The self-seeking clerical mountebank, although he draws large audiences to the Chautauqua, is not taken seriously. Neither is our profession as a whole condemned because it has so many undesirable members. In its ranks are many of the noblest men in the world, and these uphold its honor and traditions.

The specialist is the original commercial doctor—from him all the others receive their inspiration. It was thirty-five or forty years ago that this dapper gentleman with a soft, insinuating voice and an itching palm came among us, shaking hands all around; when lo' there gushed a wide-spread epidemic of itching palmitis, which is yet raging. My, how the infection spread! Very few doctors escaped; so few were immune. Unfortunately, the disease is neither self-limited nor fatal. Once infected, always infected—rebellious to all forms of treatment—incurable as leprosy. Yet paradoxical as it appears, the subjects of this malady suffer no pain nor discomfort; eat well, sleep well, are fat and sleek; yet those who do business with them suffer greatly—in a financial way.

A parable: A certain man was hanged, that he died, and he left two sons, honest men.

Now, one of the sons was a blacksmith; but the other became a physician.

And after that their father had been taken from them these brothers made their homes in other lands.

And the blacksmith would have prospered, but it befell that one asked him how his father made end.

And the blacksmith looking angry upon him answered: "He was hung." For the blacksmith was an honest man.

Howbeit, presently, when a horse was missing, men gathered and hanged the blacksmith, saying: "This man must take after his father." So the blacksmith did take after his father; but whether he caught up with him the tale telleth not.

And, at the same time, in his own city, one inquired of the physician by what means his father died. And the physician covered his face and wept.

But whilst he wept, he considered, saying within himself: "If I say, 'He was hanged,' then shall I shock this man, and give him pain. Nevertheless, I must tell the truth."

He said, therefore: "My father died of heart failure." And again he wept, the questioner weeping with him.

Then, this being told, men said: "Doubtless, since his father died of heart failure this good physician and loving son hath made study of kindred diseases." So they resorted unto him.

And the physician became a specialist, and he looked at them who came and coughed once and sneezed twice, and demanded \$100. And they gave gladly. For the physician was an honest man.

Seriously, although specialism has led the progress in medicine, and is now indispensable, it has much to answer for. It has in a large measure, among other things, alienated the public from us.

The public grew cold and indifferent toward the specialist, first, and soon afterward toward the general practitioner, and the old family doctor, friend and counselor, was henceforth less warmly received, but not altogether tabooed.

As for the specialist, the people regard him as a near holdup; and indeed, there is some color of justification for their estimate of him, judging from this incident which is one of many occurring daily. An overworked nervous man consults an eminent specialist: "Can you go to Europe for a few months?" queries this eminent man in the blandest of tones. "Oh, yes, if necessary," is the reply. "That will scarcely be necessary," the great man replies. "Take this, and report in a week," handing him a prescription for some proprietary. "Your fee, doctor?" "Fifty dollars, please."

You will note that the question about the European trip was a ruse to ascertain if the man had money? It were better to be a dog and bay the moon than such a grafter.

One of my neighbors told me the other day that a sister of her's who resides in New York City imagined that she was a confirmed invalid, and after making the rounds of several doctors finally called on one more famous than others. "Madam," said he, "do you know that my fee is fifty dollars for a consultation?" She told him that twenty-five dollars was as much as she was able to pay for a consultation. "Fifty dollars is my fee," he said, and bowed her out of his office. This is commercialism of the first water. A man with a pain in the abdomen from slight indigestion is hurried to the hospital and a normal appendix removed for \$150. Commercialism or larceny, which? A woman almost moribund from cancer of the uterus has a hysterectomy done to the tune of \$300. Graft, or robbery, just as you choose to call it.

When one witnesses a capital operation done on a near cadaver, he at once recalls Nelaton's famous description of Sir Henry Thompson's operation for stone on the emaciated Napoleon The Third: "The brutal Englishman—I can see him now—thrusting his tools into the organs of a moribund."

There is a form of graft more damnable than any yet mentioned—more damnable because linked with perjury. Certain physicians of a degenerate type conspire with malingerers to rob corporations under the pretense that the impostors have sustained permanent injuries. These physicians, criminal by instinct, and shameless through long corrupt practice, do not hesitate to go on the witness-stand and unblushingly swear that their confederates were seriously and permanently injured, knowing full well that their statements are false. Such physicians should have their license revoked, or, better still, be sent to prison for a long term of years.

The question of the division of fees will not down, and we had just as well settle it right here and now. Let us be honest with ourselves: Is it right? Is it ethical for one doctor to collect a fee from a patient and give part of it to another doctor, who, perhaps, has not earned one penny of it? For instance, a doctor sends a cataract patient to an oculist, who operates for, say \$100 or \$200. What just claim has that doctor on a percentage of the fees? None whatever. No need to multiply instances of this kind. But suppose the local doctor, at patient's request, accompanies the patient some distance, loses time and incurs traveling and other expenses. It is right and proper that he should be reimbursed; but the local doctor should present his bill to the patient. The operator can add the amount to his fee and collect the two fees together, but the patient must know of this arrangement, the amount of the separate charge and acquiesce in it. Nothing should be done secretly—nothing subrosa—everything above board. The idea of two doctors secretly dividing a fee which one of them has collected reminds one of the methods of the heavy villain and his pal in the melodrama. Division and silence may be a good motto for politicians, but not for doctors. When the family physician and the surgeon jointly operate on and treat a patient, then an equal share of the fee is just and honorable; but even then the patient should know the details of the arrangement.

One of the worst features of this division of fees is that the commercial doctor will seek the most liberal, rather than the most capable consultant, and then divide the fee. This is degrading. It degrades him that gives and him that receives. A doctor cannot, more than another, get money by indirection without loss of self-respect.

The question of legitimate fees can be adjusted by each city and county for themselves. However, any hard and fast rule is difficult to enforce,

even if it were desirable to do so. But a list of prices for the various services rendered is very essential. We are often asked by the courts what the customary fee is for such and such service. And we should have an agreed schedule to offer in reply.

A fixed fee for services to rich and poor alike should not be rigidly adhered to. The poor man and the impecunious widow cannot pay as much for the care of a case of typhoid fever, for instance, as can the family of independent means. Whatever is done to the wealthy the poor must not be oppressed. Moderate charges and sure collections is a good business policy.

Now what is the remedy for the evils complained of? How can the abuses which have crept into our profession be corrected and prevented in the future? The present offenders cannot be reformed, but we can hold them up to scorn and contempt, and thus make graft and commercialism odious. The rank and file of the profession are free of any taint, and they can make hue and cry against the grafter until he

becomes ashamed to employ his disreputable methods except when he is certain of absolute secrecy.

Teachers in the medical colleges must warn their students against the sins of commercialism. Chairs should be established for teaching ethics, and the best men in the profession called to fill them. Young men must be taught that the medical profession is not the place for avaricious spirits—that an honorable competence is all that our profession offers the average doctor, and that no one should enter it who does not feel “Woe is me unless I study medicine.”

The foregoing strictures were not made in a spirit of carping criticism, but with a sense of deep shame and humiliation that the honor of our profession should be tarnished through the corrupt practices of some of its own members.

Gentlemen, in conclusion, let me say that our profession, with all its faults and limitations, is a noble one, and my earnest desire is that we all may walk worthy of our high vocation.

THE Germans are taking extraordinary precautions to prevent the spread of transmissible diseases among troops as well as inhabitants of towns and cities in Germany. The army is accompanied by consulting hygienists from the ranks of the best university instructors and by a whole staff of bacteriologically trained army surgeons. The base hospitals have portable bacteriologic laboratories, and there are also available for investigations the Berlin Institute for Infectious Diseases, the laboratory of the Kaiser Wilhelm Academy, and the Imperial Health Office. The most important thing in controlling an epidemic is the discovery of early cases, not only persons who are clinically sick, but more especially the so-called germ carriers. These are the most dangerous because they are not confined to bed and may infect their environment. They must be kept under constant bacteriologic supervision as also the sick that are received from Belgium and France, who, although they have been vaccinated against typhoid, may still be germ carriers. The German population has been made nearly free from contagious diseases through the organized anti-typhoid campaign and the isolation of all typhoid cases that appear in the army. The isolation rooms in hospitals are protected with gauze or wire netting at the windows from the access of flies and mosquitoes, as experience has shown that these are likely to convey disease germs to foodstuffs. No stagnant water is permitted to

remain in the neighborhood of the hospitals, and if pools cannot be drained they are sprayed with crude petroleum. The water-supply is bacteriologically examined, and when found necessary, the water is boiled before being used. Protective vaccination is employed in threatened typhoid and cholera. The German surgeons serving with the troops at the front have been unremitting in their attention to duty, and the effectiveness of their work is told by the fact that the health of the troops has been exceptionally good, and so far no epidemic has arisen, even though the war has been carried on in adjoining countries where hygienic and sanitary conditions are not as good as they are in Germany. Vaccination has been strictly enforced, and where necessary has been carried out among the hostile inhabitants. Apparatus for examinations for typhoid, cholera, and dysentery, and vaccination material are carried with the army. No greater testimony as to the progress that medical science has made in the last twenty-five years can be offered than the results presented in health conditions attending the greatest of all wars. When the history of the present war is written, the part that has been played by medical science in preventing and stemming the ravages of diseases which heretofore has crippled armies and added to the death loss, will stand as a monument to the thoroughness and effectiveness with which medical science has acted.

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SURGERY OF THE KNEE-JOINT

Edred M. Corner, London, England (*Journal A. M. A.*, Sept. 26, 1914), speaks of the dangers generally of what he calls cavity-less surgery when bleeding occurs and then passes on to surgery of the knee-joint. The main principles to be carried out, if possible, are to plan the incision into the knee so that it gives the maximum exposure, access to the back of the joint and the minimum of hemorrhage and of injury to important parts. He condemns the horseshoe incision often used when the patellar ligament is severed, though he admits that if the skin incision is made to pass below that, it may deserve better consideration. Transverse incisions in front of the joint are second best and he speaks well of the longitudinal one down through the middle of the patella. The pathologic states of the knee are reviewed. He finds in the St. Thomas Hospital reports the number of operations for loose bodies in the joint has markedly diminished and the term "internal derangement" has been used rather inclusively since 1909. Two facts are noticeable. One is the lessened number of operations for tuberculosis and the other is the large and steady increase of operations for "internal derangements." He describes the distribution of the ligaments and says that the crucial ones are the strongest and the ones most liable to injury. There are clinical signs which indicate such injuries. These are: movement of the tibia on the femur and its dropping back, or any rotation of the tibia on the femur, almost always external. The leg must be carefully compared with that of the other side but in an old case the above signs may not appear and the most valuable symptom is the complaint of lack of stability in joint and what is well-known clinically as slipping knee. The crucial ligaments are most prone to injury in exaggerated flexion or extension of the leg. The semilunar cartilages are most strained from movements of rotation with semiflexed joint. The bony attachments also bear a strain and may suffer. The synovial membrane is loosely attached around the front of the knee but is closely at-

tached to the knee where it covers the crucial ligaments and at the back of the joint, where slight injury may tear it and cause synovitis. As regards loose bodies in the joint the clinical reports indicate six points: The rarity of learning the origin of these bodies; their frequent multiplicity; the frequency with which they are called recurrent; how often they consist of fibrin; how often they are temporarily lost in the joint and apparently how long they can be present without causing any symptoms. Corner suggests that the majority of loose bodies have an origin in the tear of the synovial membrane in the back part of the joint which ought to be more frequently explored. To do this he would urge the use of the method of opening the joint by splitting the patella sagittally, and he gives the anatomic reasons for this recommendation. He also describes the method of suturing the wound and says suture without drainage is best and if drainage becomes necessary it can be provided two days later through the popliteal space. In all cases with fever this space should be examined at every dressing and compared as regards fullness with that of the other leg, as pus is liable to accumulate here. He recommends shortening for crucial ligaments, if they are stretched or loose, by drilling through the external condyle and the ligament itself. The operation of removing a semilunar cartilage is done by him by splitting the patella longitudinally. If the case merely demands the removal of a dislocated cartilage or loose body which can be felt, a local incision is better. The proper treatment for an intra-articular fracture of the femur is, he thinks, to stitch the fragment in place rather than to remove it. In fracture of the spine of the tibia he would also anchor it instead of removing it. He is an advocate of operation for all these injuries and would counsel it early in joint injuries and leave no bleeding behind in the joint.

NEWSPAPERS DEMAND PAY FOR BEING DECENT AND HONORABLE

Under date of September 20 the *Lafayette Ledger* contains an editorial complaining because the local doctors are taking up the cudgel against migratory doctors who go into a town heralding their ability to do wonders in the way of curing the sick and afflicted. In an attempt to bring the regular medical profession to task the fact is pointed out that reputable doctors do not employ the daily press as a booster for their business and even have a rule of ethics

which prohibits newspaper advertising. The query is then offered: "Is it just right to condemn the papers for accepting paid advertising, and then refuse themselves to use the newspaper columns?"

This reminds us that a Fort Wayne newspaper that carries the advertising of a lot of quack doctors and patent medicine concerns, advised a representative of the local medical profession that if the reputable doctors of the city of Fort Wayne would take a certain amount of advertising space—and it has been estimated that the space mentioned was about four times the space held by quack doctors and patent medicine concerns—the said paper would agree not to accept the advertising of any quack doctors or patent medicine concerns. Could any argument be better proof of the insincerity and greed of the one that makes it? Why should the editor or owner of a newspaper be paid for being honest or even decent? There is not a man connected with the newspaper business that does not know that practically all of the advertising doctors are quacks and imposters and much of their advertising indecent and unfit to go into the home, and that nearly all if not all of the patent medicines are frauds. Both advertising doctors and patent medicine concerns thrive because of newspaper advertising, and both, as a usual thing, victimize the ignorant and poor, a class of people who can least afford to suffer from the effects of imposition.

The owner of the newspaper who accepts advertising from patent medicine manufacturers and itinerant doctors is aiding and abetting a cruel fraud. With the government constantly after these fakers, and with a knowledge of their swindling operations as readily obtained through exposures that have been made by the government, by medical journals and some of the better class of lay journals, it is folly to plead ignorance concerning the nefarious business that is carried on under the approval and with the assistance of so many newspapers.

Some of the newspaper owners, like one who owns a leading Fort Wayne newspaper, is a church leader and poses as a highly moral man. What kind of a conscience has such a man when he takes money for advertising that he has ample reason for knowing is fraudulent in intent? The asinine demand on the medical profession by another Fort Wayne newspaper owner that reputable doctors must make up any deficit occasioned by dropping the objectionable patent medicine and itinerant doctor advertising shows another species of perverted conscience. Why not carry the advertising of saloons and dance halls and

ask the temperance organizations to pay for the loss occasioned by dropping such advertising? Or why not carry the advertising of bawdy houses, and ask ministers and members of churches to make up the loss occasioned by cancelling such advertising?

Has it come to pass that the editors of lay papers must be *paid* to do the honorable and right thing, and is it possible that the owners of newspapers have no virtue nor honor to be asserted without a money consideration? Fortunately there is an ever increasing list of newspapers whose owners are beginning to realize that they owe something to the public in the way of protection from all that is dishonest as well as dishonorable, and we are pleased to announce that *The Lafayette Leader* could, with propriety, take a lesson from the stand that has been taken by the *Lafayette Courier* as announced during the annual session of the Indiana State Medical Association held in Lafayette September 24 and 25.

Doctors, as a class, do not resort to newspaper advertising because such publicity and exploitation is considered not only unprofessional but in bad taste. They believe in letting their works speak for themselves. The better class of lawyers do not advertise, and yet you never hear the newspapers complaining because no advertising patronage is received from that source. It would be just as pertinent to ask ministers to advertise in a newspaper because that newspaper begins to preach righteousness, as to ask reputable doctors to advertise because a newspaper is declining to accept fraudulent medical advertising. We admonish our newspaper friends to be consistent in their demands, and we offer the suggestion that it does not speak well for their sense of honor or justice to the position they hold as moulders of public opinion, to solicit pay for doing what they know is right.

EDITORIAL NOTES

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better *Journal* for you.

SOME of our advertisers desire to have you get acquainted with their products, and therefore request that you write them for samples or catalogues. Look through the advertising pages for announcements of that kind and when writing to advertisers do not forget to mention *THE JOURNAL*.

It costs only a 2-cent stamp to write any one of our advertisers, all of whom are anxious to get in touch with you by sending you either samples or catalogs. Why not show that you read the advertising pages in *THE JOURNAL* and desire to support reputable firms by taking advantage of some of the offers?

MANY of our readers may be looking for a new location, or are in the market for equipment of some kind. Recently we have been carrying among the commercial announcements a number of For Sale advertisements in which locations are offered for sale or exchange. We have carried regularly the side announcements of numerous regular advertisers. Our readers should profit by scanning the commercial announcements each month.

THE comprehensiveness and mechanical excellence of the completed program as distributed at Lafayette called forth considerable praise. It may not be amiss to remind our readers that the programs and the reprints of committee reports distributed at the annual sessions are prepared and printed under the direction of *THE JOURNAL*, and the fact that our printers are medical and not lay printers has much to do with the promptness and accuracy with which work of this kind is turned out.

THE attendance at the Lafayette session was larger than expected, and in consideration of the fact that the Committee on Arrangements announced that it would be difficult to care for a large crowd owing to limited hotel accommodations, we believe that considerable credit is due the local committee for satisfactorily caring for all visitors. While some little confusion arose as a result of misunderstandings as to prior engagements of accommodations, on the whole every one was given courteous attention and comfortable quarters.

THE prospectus of the Pettey and Wallace Sanitarium Company of Memphis, Tenn., has just been received. It is a creditable production from a mechanical standpoint, and is a well written description of the new Pettey and Wallace Sanitarium for the treatment of those who are addicted to narcotic drugs or alcohol, or are suffering from mental or nervous diseases. Drs. Pettey and Wallace have enjoyed the confidence and respect of the medical profession for many years, and undoubtedly their new institution will continue to merit such approbation.

OUR readers may notice some new advertising on the front cover page. To our notion this very conspicuous space is very appropriately occupied by the announcements of a well-known firm of medical publishers. The publication of a new work on any branch of medical science is a matter of interest to all progressive physicians, and we are pleased with the prospect of having our front cover page the medium through which many such announcements are to be made. It is the appropriateness of the advertising which leads us to offer this comment.

SPLITTING FEES BY PHYSICIANS.—Where a person requiring a surgical operation is treated by the family physician and the operation is performed by another physician assisted by the family physician, can the latter act as agent for both parties and draw pay for both parties without the knowledge of the patient? The Supreme Court of Michigan, in *McNair vs. Parr*, 143 Northwestern Reporter, 42, holds that any tacit understanding or agreement between two doctors for division of fees would be against public policy and void, and that the patient, in an action by the operating physician for his fees, has reason to show that plaintiff has charged an unreasonable sum for his services in order to divide the fees with the family physician.—*North Vernon Plain Dealer*.

A MEDICAL society is just about what its members make of it. It can be a society maintained for advertising purposes only, or it can be made a medium for the advancement of medical progress, a means of closer personal relationship, a stimulant for better and more conscientious work. Some men who never, or practically never, attend their county society, or any other society for that matter, claiming that its meetings are of no value to them and that they cannot afford to lose the time, but just as soon as the opportunity presents itself they will rush into print telling of their numerous qualifications and how they are members of the county, state and national societies. If these members would attend their county society it is quite sure that they would recognize the advantages other than those for advertising purposes only. It may be of interest to the members of this society to know that it leads all other county societies in the state in average attendance. In 1913 it had more members in actual attendance at each meeting than any other county society but one, and that had a membership of nearly 300.—*LaPorte County Medical Society Bulletin*.

MOST of our readers are familiar with not only the unfair but dishonest treatment accorded the medical profession and all that it stands for by the numerous weekly called "*Life*." No falsehoods or misrepresentations concerning the medical profession have been too brazen to escape publication in "*Life*," and a systematic and studied effort has been made to discredit the triumphs of modern medicine and to support the various organizations that make a profitable business of opposing scientific medicine. Not once, but many times have protests from medical men and laymen been ignored, and quite recently a pointed letter of protest from a layman, Mr. Charles Fahs of Madison, N. J., was returned by "*Life*" with the statement that it was "not available." We wish that the letter and appropriate comments as published in *The Journal*, A. M. A., October 3, could be reproduced in every lay publication in the country that stands for the square deal.

WANTED!—5,000 Christian Scientists, osteopaths, chiropractors, vitapaths, neuropaths, spinologists, mental healers, and representatives of any other class of incompetents who are pretending to care for the sick and suffering, to go to Europe and serve in the army hospitals or as physicians on the field of battle! Such an advertisement might, with all propriety, be sent out by the American Red Cross Association or by the medical and surgical departments of the various European countries that are now at war were it not known that these pseudo-doctors are of no use whatever when it comes down to the real test of caring for stricken humanity. When the people are ravaged by pestilential diseases or the terrible destructiveness of war, they cry out in their need for *real* doctors who have been thoroughly educated and trained in all of the branches of medicine and surgery. They want none of the pretenders with their limited knowledge and still more limited skill, who, in ordinary times, ply their vocation with no little pecuniary profit and in the majority of instances with little or no benefit to humanity. It would seem that the lesson might be turned to profit and that the public would begin to recognize the necessity of demanding competency in those who are to offer their services in treating the ills of mankind.

ONCE more we desire to refer to the purchase and use of cheap and inferior drugs and pharmaceuticals. A common complaint among reputable manufacturers is that many doctors buy and use drugs and pharmaceutical specialties that are

not what they are represented to be but are sold at a price that cannot be met by reputable houses. Every doctor should have as his motto, "Not the cheapest, but the best;" for if there is any one thing used by the physician that should be of unquestioned quality it is the drug that is to be administered to the patient for a certain therapeutic effect. It is an easy thing to furnish second quality, short weight, or badly compounded drugs or pharmaceuticals, and whenever the doctor is offered preparations for a price that is less than that charged by well-known manufacturers of established reputation it is a safe bet that there has been a lowering of the standard, for it does not stand to reason that some of the smaller, unheard of manufacturing pharmacists are able to undersell established houses that buy and sell in quantity, are equipped with the best facilities, and have the pick of the market as to quality. There is an old saying that you usually get what you pay for, and it is as true in the purchase of drugs as in anything else. Cheap drugs usually spells poor quality or short weight, and generally both. "The cheapest is never the best nor the best ever cheapest."

The Journal of the A. M. A. for September 26 editorially compliments health administration in Indiana, which it states for a long time past has been vigorous and energetic. "It has also been unique, peculiarly up-to-date and popular in its methods of attracting attention and affording instruction. The last activity of the health forces of the state is thoroughly characteristic. Governor Ralston issued a proclamation designating Friday, Oct. 2, 1914, as Disease Prevention Day. He urged the cities and towns throughout the state to make special arrangements for appropriate exercises, emphasizing the importance of public health, and the joint responsibility of all citizens therefore in order to inspire in them a desire to cooperate in all sane efforts for the prevention of physical diseases. The State Board of Health prepared a special bulletin containing a copy of the governor's proclamation and suggestions for the celebration of Disease Prevention Day in towns of Indiana. Some of these suggestions are terse and apt and deserve to be circulated.

"Get up a public health procession. In cities the mayor should head the procession; in towns the town board of trustees, the town board of health under the law, should lead. There should be a brass band; drums and trumpets should be used; music is necessary for a procession; school girls dressed in white bearing banners with

health mottoes, boys in white or otherwise neatly dressed carrying banners with health mottoes. Where there are high schools, the pupils should try to present some original idea representing the importance of disease prevention."

ONE of the readers of *THE JOURNAL* who appreciates the fact that we protect the members of the Indiana State Medical Association by accepting advertising of approved quality only, has seen fit to write a well-known firm complimenting them on the quality of their goods, and advising them that he believes in giving them a share of his patronage because they are advertisers in *THE JOURNAL*. We trust that we may be pardoned for publishing the answer, which is duly appreciated by those responsible for *THE JOURNAL*. The letter is as follows:

PHILADELPHIA, Sept. 25, 1914.

Dear Doctor:—We have pleasure in acknowledging receipt of your communication of the twenty-third, and are glad to know that you are a believer in reciprocity, especially when it can be backed up with quality.

We trust that your journal may continue to prove an excellent advertising medium for the products of our house. It is clean, fearless and well edited, and in our opinion one of the best state journals published. For these reasons we advertise therein. With personal regards of the writer, we are,

Very truly yours,

H. K. MULFORD COMPANY,

Per H. K. Mulford.

To Mr. Mulford we might say, "It pays to advertise in a journal of quality," and to us he might with good propriety say, "It pays to publish a medical journal that merits the support and respect of advertisers of quality." Anyway, we can assure our advertisers that as long as *THE JOURNAL* is under the present management it will continue under the policy and maintaining the ideals which have brought forth a compliment from a well-known firm.

THE House of Delegates has made a rule to the effect that no objectionable exhibitors and no pharmaceutical products not approved by the Council on Pharmacy and Chemistry of the A. M. A. shall be permitted to occupy space in the exhibitors' hall at any annual session of the Indiana State Medical Association. There is an old saying that "mistakes will occur in the best regulated families," and we feel that an explanation is necessary in connection with a misunderstanding which permitted a breaking of this rule at the Lafayette session. Unfortunately the general Secretary of the Association has too much work to look after at each annual session, and of

necessity he is obliged to delegate some of his work to local committees or others who can give him assistance. Without any attempt to apologize for acts that were unintentional, and based on inadequate knowledge of propriety, we desire to admit that it was a mistake to permit the exhibition of the products of the Bannerman Company of Chicago, and the products with fanciful names and misleading suggestions as to clinical value exhibited by the Lafayette Pharmaceutical Company. The fact that these two firms through a misunderstanding on the part of representatives of the Association were permitted to exhibit objectionable products at the Lafayette session should not in any way be construed as an endorsement by the Indiana State Medical Association. In fact, in order to live up to the spirit of the rule adopted by the Association, the firms exhibiting questionable products at the Lafayette session should have the money paid for exhibition space refunded.

THE appearance of a number of reviews of current medical literature leads us to offer the following query: What do doctors read and how do they make their selections? Out of the voluminous pages of current medical periodicals the busy doctor has time for but a limited amount of reading, and the selection of the periodicals from which he is to obtain information that will be of profit to him as well as to his patients should be a matter of serious consideration. The specialist will, of necessity, subscribe for one or more of the best special journals, but every physician whether a specialist or not should scan the pages of one or more high class general medical journals, and with a view to keeping in touch with local conditions, he cannot afford to ignore his own state journal. But if we are to improve on the character of our medical publications we must refuse to subscribe for, contribute to, or even receive journals that are steeped in commercialism as evidenced by the objectionable advertising they carry, the readiness with which the editorial pages are given over to the exploitation of commercial objects, and the frequency with which the department devoted to original communications is sacrificed to either notoriety seekers or writers who have a particular axe to grind. The medical journal that is really worth while is the one that adopts and rigidly follows a policy that guarantees quality in all of its pages, advertising and all. In other words, it is the medical journal that protects its readers in every conceivable way. There are a fairly large number of such journals, and they deserve the support of all progressive physicians. Sub-

scriptions to medical journals should be based on the character of the journals, and the analysis should be extended to the advertising as well as the reading pages.

THERE have been many complaints concerning the manner in which programs for the annual session of our Association are prepared. In justice to the Scientific Committee we desire to remind the members of the Association that it is a difficult as well as a thankless task to get up a program, and no matter what kind of a program is prepared, or who gets it up, there will be complaints from some quarters. A striking criticism is that some very capable men who desire to present papers at the annual session are barred for the purpose of making a place for a very commonplace paper by a very commonplace essayist. The committee has very wisely decided that every portion of the state should be represented on the program, but we do not believe that the members who go to our annual sessions should be compelled to waste their time listening to mediocre papers, and we believe that any paper that finds a place on the program should have the approval of the committee before it is placed on the program. We are strongly of the opinion that to avoid friction and misunderstandings the section officers should be held responsible for the section programs, but the sad experience of the Medical Section at the Lafayette session reminds us to say that officers should be selected with considerable caution in order to insure prompt and efficient service. There is much to commend in the plan of having a part of the program by essayists who, because of their peculiar fitness to discuss certain subjects, have been invited to fill a place on the program. This is especially true in the case of symposia, and officers are to be commended in their efforts to have live subjects discussed in a comprehensive manner through the medium of several papers divided according to the different phases of the subject. However, it would not be a bad idea to prohibit any one man from reading papers at our annual session two years in succession. There should also be a rule limiting the number of papers to five for any one meeting. The most successful meetings of any organization are those that have been antedated by careful preparation, and the conduct of which has been systematized.

SOME of the district medical societies in Indiana need rejuvenating, and nearly all could be improved if they were given a little more attention. We have frequently remarked that most

of the success of medical societies depends on energetic and progressive secretaries. Some secretaries work if they find that they receive ready cooperation, but they give up the job early if they happen to meet with any discouragements. We hope that many of the new secretaries may profit by the experience of one secretary who informed the editor of THE JOURNAL that he kept hard at work for a period of one year before he could even get together enough physicians to perfect an organization, but in the end he succeeded in establishing one of the best societies in the state. His success depended on keeping everlastingly at the duties imposed on him.

As an evidence of what one secretary is attempting to do in order to stir up interest, we reproduce a letter which we think is worthy of publication. It was sent to the members of all the county societies in the Twelfth District. The letter is as follows:

Dear Doctor:—This is not a reminder, not an invitation, but a challenge. With the exception of from twenty to forty members, the Twelfth District Medical Society is composed of the most moribund crowd of M. D.'s in existence outside of that great throng that awaits us on the other shore. Moribund, did I say? Yes, if not already defunct. Camphorated oil, whose chief indication is in impending death, would not wake 50 per cent. of our members up sufficiently to permit them to read the program, let alone attend the meeting or take part. Our next meeting is going to be the biggest meeting that we have had since I have been a member or I am going to resign the position of secretary. I refuse to be the shepherd for a flock that has not ambition enough to graze when they are led to the long green, or to drink from the fountain of knowledge even when the bell-wether leads the way.

Now, I said this was a challenge. I dare you to appear at that meeting long enough to find out what it was held for and then say that it did not pay you for the time and trouble that you took to get there.

I realize that some of the recipients of this Philip-pie do not deserve the castigation contained therein, but there are so darn few who have not got it coming to them that I am sending it to all for good measure. I am going to write you about once a week until the time of meeting, and if you do not attend it, I am going to be so sore that a lead and opium wash will feel like a mustard plaster.

Yours for a reincarnation and resurrection from the dead,

MILES F. PORTER, JR., *Secretary.*

Following closely on the heels of the above was a second letter which is as follows:

Dear Doctor:—Well, I am praying for rain and when a Methodist prays for rain it is always clear, so dust off the license number on the Ford and get ready for the big trip to the city on October 28. Sure, I know that is early, but by having the meeting on that date we save \$75 expense money and we do not dare take any chances. Can you see thirty-

two men—the number that attended the last District Meeting—paying \$75 expenses in addition to the usual cost of the meeting?

The list of essayists is complete and in order to whet your appetite, I am going to tell you who they are. Fred Metts of Bluffton; H. O. Bruggeman, Fort Wayne; Grisier, Jr., Columbia City; Allen Hamilton, Fort Wayne; and to cap the climax, Hugh Cabot of Boston. Now Brother, if such a quintet as that can not furnish enough mental pabulum to satisfy the most voracious craving of your intellect, where in the fields of modern medical science are you wont to browse? Every one of those papers is going to be short, up to the minute, and read on a given schedule. Every discussant gives me a moral promissory note, guaranteeing his appearance or his name does not go on the program, and the meeting starts on time, barring fire, flood and tornado.

Just one more thing. This meeting is only an experiment. If the attendance this fall warrants it, we shall have the most elaborate spring meeting ever held by the society. But I refuse to invite men to come from 500 to 1,000 miles to take part in a program for the benefit of half a hundred men. The spring meeting is up to you.

Yours very sincerely,

MILES F. PORTER, JR., *Secretary*.

SLOWLY but none the less certainly the lay press is gradually cleansing its advertising pages of objectionable matter, and in particular the misleading announcements of quack doctors and patent medicine concerns. The *Lafayette Daily Courier* is one of the newer converts to the idea that a newspaper owes it to its readers and the public in general to have clean advertising pages, and while the Indiana State Medical Association was in session at Lafayette this paper published on its first page the following announcement:

THE COURIER TAKES FORWARD STEP IN EXCLUDING FROM ITS COLUMNS ALL OBJECTIONABLE ADVERTISING

To-day *The Courier* takes one more forward step in purging its advertising columns of objectionable matter. No more advertising, on new or existing contracts, will be accepted from doctors or specialists advertising what they can cure or relieve.

This is merely a part of a plan to give Lafayette a clean, wholesome newspaper, that can be taken into any home and read thoroughly without giving offense to the reader.

For years past there has been seldom a month pass that *The Courier* has not returned advertising and checks in payment for same because the text matter was obscene, or on the face of the advertisement it seemed fraudulent.

Since last spring there have been at least three so-called men's specialists open offices in Lafayette. Each one on offering "copy" to *The Courier* has been refused the use of these columns. The advertising offered was not only obscene and unfit literature to put in any home, more especially where there are children, but the men operating the offices came to Lafayette with questionable reputation. Stories cur-

rent now tell how, in the short time they have been here, some of the alleged specialists have attempted swindling their victims.

Any quack doctor to continue in business is almost entirely dependent on newspaper space for his livelihood. If the entire press of this city will withdraw their support from the advertising quacks it will be only a short time until they move on to a more friendly field with a friendlier press.

Matrimonial advertisements that have always found a ready welcome in some of the columns of the Lafayette press have never been accepted by *The Courier*. While some such advertisements are placed in good faith, the great majority are for filching the unsuspecting out of a few dollars, and very often they lead to more dire results. We reprint a matrimonial advertisement clipped from last week's file of a local paper such as *The Courier* never accepts.

WANTED—To correspond with young lady of 18 to 20. Must be sociable and pleasant. Object in the end, matrimony. Address _____.

Seldom a month passes that the government agents are not rounding up crooks in the matrimonial business. If it were not so hard to secure evidence from people who have been taken in by these agents, on account of the very undesirable publicity attached to a complaint, the business would not be so popular.

Here is one kind of fraud perpetrated on the public that can not be carried on without the use of newspaper space.

There is no doubt that legitimate advertisers approve being in good company when they advertise. Without waiting for any pressure being brought to bear, *The Courier* has eliminated a class of advertising that, while it is very profitable to any publisher who accepts it, is a source of contamination for good advertising and offensive to most readers.

The Courier will welcome the day when all of the quack doctors have left Lafayette because the press will not cooperate with them by lending their columns for such filthy advertising as Lafayette is now forced to submit to.

We regret that there are not more papers ready to take the stand taken by the *Lafayette Daily Courier*, but, as we said in the beginning, there seems to be an awakening of the consciences of numerous newspaper editors, and there is a popular demand for cleaning up the advertising pages, so that within a few years a newspaper that does not join good company will have a tough time maintaining its existence. As we have frequently remarked, the quack doctor and patent medicine advertising injures the ignorant and the poor, both of which need protection. There is not one editor out of ten who does not know that such advertising is for the most part fraudulent in intent, and a menace to the best interests of the public, yet because of the income secured from such advertising he lamely defends his action by saying that the public is able to discriminate between the good and the bad and that it is not his duty to act as a censor. Fortunately there is a growing sentiment which

leads editors of lay publications to appreciate the ethical principles involved in the publication of a medium that carries with it an influence for good or bad, and we hope the time is not far distant when no editor will feel justified, from an ethical as well as a business standpoint, in accepting the advertising of quack doctors or patent medicine manufacturers. In the meantime, much praise is due those lay publications that have taken the initiative in this movement for better things.

THE officers of the Section on Medicine failed to show up at the Lafayette session of the Association, and neglected to notify Secretary Combs of their intended absence so that substitutes could be provided. In consequence the affairs of the section were badly managed and in a condition of disorder, and to cap the climax the section failed to elect officers for the ensuing year. President Wynn has come to the rescue by appointing officers, and it is hoped that they will save the Section on Medicine from the failure that seems in store for it unless prompt action is taken. The scheme of allowing sections to elect their own officers will be disappointing in its results, and even disastrous to the meetings of the sections unless those officers take an interest in getting up the programs and are present at the annual sessions to preside at the meetings of their respective sections. It is of course recognized that unforeseen circumstances may prevent attendance at an annual session of the Association, but realization of the importance of their positions should prompt officers to notify the general secretary concerning their intended absence so that substitutes may be provided. With only a session of two days, as compared with three or four days in other associations, time is of the utmost value, and an hour less in starting a meeting is to be multiplied by the number in attendance to estimate the actual loss involved. Members of the sections should bear this in mind when electing officers, and after having once found a secretary who is prompt and dependable, the section should continue him in office. We have heard many complaints concerning the bad management of the Section on Medicine, and the way one essayist feels concerning the matter is voiced in the following letter:

MUNCIE, Sept. 26, 1914.

Editor of The Journal:

I wish to register a complaint and a protest. I was scheduled to read a paper before the Section on Medicine at the Lafayette session at 9:00 a. m., on Friday, September 24. I was on time, so was the audience. We waited until 9:30 without being called to order, when I went forward and asked the sten-

ographer the occasion for the delay she replied, "Neither the chairman nor the secretary of the section are present." At this time persons were continually leaving the room. Finally at 9:50, after a waste of fifty minutes, Dr. Wadsworth of my own city, took the chair and got things started, but we were handicapped the balance of the meeting. The discussions were cut short and there was no time for rebuttal. It occurs to me that some means should be adopted to prevent the repetition of this circumstance.

Sincerely,

H. D. FAIR.

We are quite in sympathy with the idea that something should be done to prevent a repetition, and we hope that the section officers who are to serve at Indianapolis next year will profit by the criticism that has been offered.

THE Laporte County Medical Society publishes a monthly bulletin with announcements for the month. The October bulletin contains a write-up of the Lafayette session of the Indiana State Medical Association. From the write-up we extract the following:

Dr. A. C. Hamilton, author of "Fees and Fairness" was in attendance at the Lafayette meeting. On arriving he was one of the most popular at the meeting, being the central figure in many an animated group. By Thursday night his popularity seemed to be dissipating. By Friday noon he was standing alone, with no one to molest or make him afraid. With the supporters of his theme so numerous and their cause a just one, why did they desert the old man as they did? It certainly can matter but little to him whether fees are split or not. His life work is nearly done. He is just about ready to quit. The fight that he is making must be largely for the other fellow, and the other fellow deserted him at the last minute. If I were in his place I would say to the other that "I still believe in the splitting of fees. I wrote the best article possible for me to write, advocating this principle. I allowed said article to be mailed to every practitioner of medicine in the State of Indiana. I made a plea for organization, that we might fight for our rights more effectively. My principles were endorsed both by my county and district societies. I was at the state meeting, prepared to put up the fight of my life for those principles so near and dear to the hearts of all of us. But you deserted me at the last minute. Not one of you dared to mention the subject of fee splitting above a whisper. Consequently we have lost our golden opportunity. We were there, and we were organized, but not one word, not one suggestion of the subject was ever mentioned in the House of Delegates, notwithstanding that some of the staunchest advocates of these principles were members of the said organization. So I must say to you that from now on you must fight this fight for greater medical freedom alone. My life is nearly spent. I love the warmth of my own fireside. I like the genial associations of those about me. I like, if I choose, to read my favorite volumes, and, when so inclined, to just dream; dream of the battles won and lost; of the many lives saved; of the wonderful advances made. I like to dream of the prettiest girl in

all the world, and of the time when I made her my wife; of our struggles and our hardships; of our successes and our failures; of how in every emergency, in every conflict, in every trial and in every achievement, she has been the one dependable friend. And when of an evening we sit together, and she perhaps dreaming of Joe, or Mary, or little Fred, I, in my dreams, will know that a battle is being waged by some of you for the emancipation of those who have not enough spirit and backbone to make known your just demands."

DEATHS

E. D. SNYDER, M.D., of Radnor, died September 5; aged 49 years.

PEARL A. MARSH, wife of Dr. J. A. Marsh of Castleton, died September 27.

J. A. HAMILTON, M.D., died at his home in Advance September 28; aged 78 years.

CHARLES M. EATON, M.D., died at his home in Robinson September 10; aged 60 years.

CASSIUS M. SMICK, M.D., died at his home in Terre Haute September 12; aged 63 years.

JOSEPH VON OSINSKI of Chesterton died recently after a prolonged illness; aged 48 years.

NIELS C. SORENSEN, M.D., government meat inspector at Terre Haute, died September 23; aged 48 years.

MARY THOMPSON, widow of the late Dr. William C. Thompson of Indianapolis, died September 17 from pneumonia.

JOHN L. PHILLIPS, M.D., died September 6, at his home in Pleasantville, after an illness of over four years; aged 74 years.

ALBERT M. FINCH, M.D., of Jamestown, was found dead in his room at the Ramsey Hotel, Crawfordsville, September 16; aged 62 years.

DENNIS CUDDAHY, M.D., of Mishawaka, died September 25 at St. Joseph's Hospital after but one day's illness. Dr. Cuddahy was 54 years of age.

H. E. BENNETT, M.D., of Mentone was found dead in his bed September 27, death having been caused by heart trouble, from which he had suffered a number of years. He was 50 years of age.

L. A. DUTHIE, M.D., died at his home in Indianapolis September 12 from a complication of diseases. Dr. Duthie was a graduate of the old Physio-Medical College of Indianapolis, and did postgraduate work in New York.

EDWARD MARKWELL, M.D., intern at the City Hospital, Indianapolis, died September 22, following an operation on September 11 in which tonsils were removed. Infection after the operation caused the death. Dr. Markwell was 27 years of age.

JOHN S. FRENCH, M.D., died at his home in Pittsboro September 19. He was born in Kentucky in 1829, was assistant surgeon of the One Hundred and Twentieth Regiment Indiana Infantry in the Civil War, and was an active member in the Hendricks County Medical Society.

JAMES R. HINKLE, M.D., aged 82 years, died September 15, at his home in Sullivan, after a three weeks' illness. Dr. Hinkle was born near Pleasantville in 1832, received his early education in the county schools, read medicine with Dr. Hamet N. Helms and Dr. John M. Hinkle, took one term at the Rush Medical College, Chicago, and graduated in 1860 from the medical department of the University of New York. He began the practice of medicine at Sullivan in 1861, where he continued until about 1900, when he retired from active practice.

HORATIO R. LUCKEY, M.D., of Seymour, died September 23 at the Schneek Memorial Hospital, where he underwent an operation for appendicitis one week before. Dr. Luckey was born in Redding Township, Jackson County, Ind., Oct. 14, 1881, graduated from the Seymour high school in 1900, and received his medical education at the Indiana Medical College, then known as the Central Medical College. He served one year as intern at the St. Vincent's Hospital, Indianapolis, and in July, 1907, located at Seymour, where he has practiced medicine ever since. He was local surgeon for the B. & O. S.-W. Railroad, was an active member of the Jackson County Medical Society, the Indiana State Medical Association and the American Medical Association.

HARRIETT E. TURNER, M.D., of Indianapolis, died September 29, at Boston, Mass., after having spent the summer in the East. Dr. Turner was a member of the Indianapolis Medical Soci-

ety and the Indiana State Medical Association. She was born in 1865.

At a recent meeting of the women physicians of Indianapolis the following resolutions were passed:

"Resolved, That with feelings of sorrow we meet to pass tribute in memory of Dr. Harriett Turner, one who has long been known as an honorable member and co-laborer in the medical profession of Indianapolis. She had in great degree the quality of personal magnetism which drew friends to her and held them fast. Always unassuming, she went about her unceasing activities with untiring energy and unswerving honesty. As student and physician she possessed industry and courage, talent, kindness, and practical qualities. Her conduct and attainments commanded the respect and admiration of all with whom she came in contact. Therefore:

We, the women physicians of Indianapolis, pass these resolutions."

DR. JANE MERRILL KETCHAM,
DR. LUELLA SCHNECK,
Committee.

NEWS NOTES AND PERSONALS

ANDERSON

THE corner-stone to the \$100,000 addition to St. John's Hospital was laid Sept. 8, 1914.

DR. FRED HENDERSON, intern, Long Island Hospital, spent his vacation with his father in this city.

DR. ALBERT L. BUXTON and Dr. J. O. Morrison spent the month of September in Iowa and various western cities.

DR. STANLEY C. NEWLIN, president of the Madison County Medical Society, will spend the winter in Florida. Mrs. Newlin will accompany him.

DR. THOMAS M. JONES has returned from West Virginia, where, with his wife and son, he spent a very delightful summer outing with relatives.

DR. WINFIELD S. BRANDON of Daleville, Ind., was a caller recently. Dr. Brandon is contemplating entering the field of "specialism," taking up the branch of pediatrics. He expects to go to Florida about December 1, and will return by New York City, where he will take a post-graduate course.

THE County Board of Commissioners and the Council met with the Anti-Tuberculosis Committee on September 8 and made an appropriation of \$15,000 for the purchase of land for the erection of the Madison County Tuberculosis Hospital, and a levy of 2 cents on the \$100 for the erection and maintenance of the institution.

BEGINNING with September 1 Dr. J. A. Long, assuming the position as secretary of the City Board of Health, has been very energetic in the extermination of diphtheria, which has been prevalent in this city for several months. A "radical clean city" has been instituted, and any child suspected of any contagious disease has been excluded from the public schools.

INDIANAPOLIS

DR. LAFAYETTE PAGE has returned from his summer home at Hyannisport, Mass.

DR. CHARLES MCNAULL, who has been in New York and Philadelphia for some little time, has returned home.

DR. AND MRS. E. F. HODGES are back from a summer sojourn in London, England, and will live at the Claypool Hotel during the winter.

DR. A. C. KIMBERLIN was called to the home of his brother in Tulsa, Okla., who is reported to be in a serious condition, the result of an automobile accident.

DR. ARTHUR E. GUEDEL has been appointed superintendent of the Deaconess Hospital, to succeed Dr. A. L. Marshall, who resigned to devote his time to private practice.

THE matriculants in the present sophomore class of the Medical Department of the University numbers thirty-nine. This is a considerable increase in the number over last year.

MRS. DAVID ROSS, wife of Dr. David Ross, lost her hand September 9, when it was caught in the fly-wheel of a motor boat on White River and torn off before the engine could be stopped.

THE convention of the Tri-State Association of Colored Physicians, Dentists and Pharmacists, representing Indiana, Ohio and Kentucky, was held at Indianapolis September 7, 8 and 9.

THE Marion County Council recently increased the tax rate 1.1 cents on the \$100, thereby providing for the erection of a county tuberculosis hospital. The plans and location have not yet been decided on.

THE Indiana State Nurses' Association will hold its annual convention at Hotel Severin October 15 and 16, and a meeting of the Indiana State League of Nursing Education will be held at the Methodist Hospital October 14.

DR. WILL C. MOORE, intern in the City Hospital, has been appointed Instructor in Anatomy in the Indiana University School of Medicine, to take the place of Dr. Rhinehart, who resigned to take a place in the University of Arkansas.

INDIANAPOLIS is again honored by the election of one of its physicians to the presidency of the State Medical Society. The name of Dr. Frank Wynn in this position is a guarantee that the medical resources of the state and especially of Indianapolis, will be exhausted in giving the Society a successful meet next year.

DR. EDWARD MARKWELL, an intern at the City Hospital, died following an operation September 11, in which he had his tonsils removed. Infection after the operation caused his death. Dr. Markwell's home was in Georgetown, Ind. He was the son of F. C. Markwell, and was a graduate of the medical department of Indiana University.

MRS. DODDS, wife of Dr. Dodds, was painfully injured by being thrown from an automobile while attending with her husband the State Meeting at Lafayette. The Roentgen ray showed a fracture of both rami of the pelvic bone a couple of inches from the symphysis and a slight dislocation of the sacro-iliac joint. None of the pelvic viscera were injured, so that a prompt recovery is expected.

GENERAL

DR. C. C. RAYL of Monroe has been quite seriously ill.

DR. G. N. DRULEY has removed from Goshen to North Webster, Ind.

DR. C. R. CLARK of Auburn was married on September 27 to Miss Helen Bauer.

DR. F. H. JETT of Terre Haute has returned from a three months' stay in Europe.

DR. C. C. KIMMEL of Fort Wayne was married September 8 to Miss Adelia Paul.

DR. MARSHALL T. SHIVELY of Marion has been quite seriously ill, but is improving.

DR. GEORGE W. ANGLIN of Warsaw was married to Miss Helen Funk, on September 15.

DR. WYMAN H. FISHER of Wanatah was married September 23 to Miss Minnie Rosenbaum.

DR. CHESTER A. SPITLER of Saratoga was married September 22 to Miss Jessie E. Orr of that place.

DR. B. J. WYLAND, formerly of Wakarusa, has located at Mishawaka for the practice of medicine.

DR. JOSEPH GARDNER, of Red Cross, Ind., celebrated his eighty-first birthday anniversary September 15.

DR. C. E. VAN MATRE of New Castle, who has been very seriously ill for some time, is recovering.

DR. J. W. LUCAS, who for some time has practiced medicine at Mt. Carmel, has located at Brookville.

DR. JOSEPH RUBSAM of Logansport, who has been in Europe for several months, arrived home October 1.

DR. HENRY C. DAVISSON of Hartford City celebrated his seventy-second birthday anniversary September 25.

DR. URBAN A. LYLE of Lafayette was quietly married at Indianapolis September 20 to Miss Sara A. Graves.

DR. JOSEPH KENTLING has moved from Smithville to Bloomington, and will continue his practice at that place.

DR. JOHN H. FOSTER, who for a number of years has practiced medicine at Wolcottville, has located at Michigan City.

DR. AND MRS. CHARLES E. NUSBAUM and party of friends of Bremen have returned from a motor trip through the East.

DR. GEORGE A. TEAL of Kendallville, who has been in poor health for some time, has gone to Chicago for treatment.

DR. A. W. CALVERT of South Bend was married September 5 at Indianapolis, to Miss Anna M. Gorby of that city.

DR. JACOB F. SMITH of Brazil is in Chicago taking some special work under Dr. John B. Murphy at Mercy Hospital.

DR. AND MRS. J. W. Strange of Loogootee lost their infant son, Norbert, September 15. Death was due to gastro-enteritis.

DR. F. ARTHUR ZELLER of Union City is taking postgraduate work at the New York Polyclinic Hospital, New York City.

THE new hospital and sanitarium at West Baden will be completed and opened to the public about the first of the year.

DR. WALTER J. CLUTHE of Tell City, who started recently on an extended vacation trip, was taken quite ill at Evansville.

DR. W. A. HOLLIS of Hartford City, has purchased the Gable home in that city and will convert same into a modern hospital.

DR. BROWN S. MCCLINTIC of Peru was one of thirty-three surgeons who sailed September 6 with the Red Cross ship for duty in the war zone.

DR. H. S. WOLFE of New Albany has returned from Bayview, Petosky and other Michigan resorts, where he went for the benefit of his hay-fever.

DR. I. W. DITTON has been appointed to the corps of medical inspectors for the Fort Wayne schools, to succeed Dr. J. H. Gilpin, who recently resigned.

DR. A. DELAPLANE, for the past two years medical examiner for the Pennsylvania Railroad at Fort Wayne, has been transferred to New Castle, Pa.

DR. A. G. CHITTICK of Frankfort, served as instructor during the annual encampment of the medical department of the Ohio National Guard, at Camp Perry.

DR. M. M. CLAPPER, who has practiced medicine for some time at Hartford City, has located at Lafayette, where he will engage in the practice of his specialty.

DR. JACOB KNOEFEL of Terre Haute was honored by being unanimously elected president of the National First Aid Association at their recent meeting at Terre Haute.

DR. B. H. LANDES, pathologist at the Northern Hospital for the Insane, Logansport, is now spending several months in New York City, taking advanced laboratory work.

THE Plymouth Sanatorium and Hospital was reopened the first of this month in charge of Dr. J. H. Boss and F. E. Garn, who purchased the hospital at a receiver's sale.

DR. FRANK DIXON of Franklin has recently passed the government examination for Army physician and has been stationed at Washington, D. C., with the rank of first lieutenant.

DR. GRACE HOMAN, who has recently completed an internship at the Cook County Hospital, Chicago, has opened an office at LaPorte, and will engage in the practice of medicine at that place.

DR. A. W. GIFFORD of Tipton, has returned from a several weeks' visit with his wife and daughter at Phoenix, Ariz., who have been out there for some time for the benefit of his daughter's health.

DR. F. L. SHARRER, who for the past seven years has practiced medicine and surgery at Francesville, has accepted a position as chief surgeon for the Guthrie City Hospital, Guthrie, Okla., and left October 1 to take up his new work.

DR. JAMES A. WORK, SR., Elkhart, was elected president. Dr. C. N. Howard, Warsaw, reelected secretary, and Dr. A. C. McDonald, Warsaw, reelected councilor for one year at the August meeting of the Thirteenth District Medical Association, at Winona Lake.

DR. F. S. CROCKETT of LaFayette, who went abroad several months ago to take a special course in surgery in London, has been appointed assistant house surgeon in St. Peter's Hospital in London, temporarily, to take the place of the regular assistant who is serving in the European war.

DR. C. M. SAUTTER has resigned his position as resident physician in the male department at Longcliff, Logansport, and has gone to New York City to take a special course in surgery of the ear, nose and throat. He expects to be gone about two years, and will then return to Logansport to practice.

DR. HALBERT P. BYBEE of Rochester, who graduated from the Indiana University School of Medicine in 1912, was married September 1 to Miss Ruth Woolery of Bloomington. Dr. Bybee has accepted a position in the Washington University at St. Louis, and will have charge of the geology department of the institution.

W. H. ARMSTRONG, aged 70 years, one of the most prominent figures in G. A. R. circles in Indiana, died September 28 at his home in Indianapolis. Mr. Armstrong has been engaged

in the manufacture of surgical instruments and appliances in Indianapolis since 1889 under the firm name of William H. Armstrong Company.

DR. EDWIN W. POINIER, after eleven years of practice at Andrews, Ind., has accepted a position as assistant to Dr. William L. Shoredor chief surgeon of Wesley Hospital and professor of surgery in Northwestern University, and left for Chicago October 1 to take up his new work. Dr. A. C. Chenoweth, formerly of Bremen, has taken over Dr. Poinier's practice at Andrews.

ONE hundred and seventy-two babies were entered in the "Better Baby" contest held at Elkhart under the auspices of the City Health Department September 28 to October 3. The physicians of the city during this week gave informal talks before the schoolchildren on various health subjects, and an exhibit of health charts was shown in the Samuel Strong School Building. The public showed a lively interest in all phases of the Health Week Enterprise.

THE Travel Study Club of American Physicians, which made a successful study tour of Europe last year, has completed the plans for its 1915 study tour to the A. M. A. meeting in San Francisco, Honolulu, Japan, the Philippines, China, with optional return via Siberia and Europe or via Canada. This being the first party of American physicians ever visiting the Far East and the new possessions of the United States, a most cordial welcome can be expected by authorities and members of the medical profession. The Travel Study Club would like to make its enterprise as representative as possible, and asks all those interested to communicate with the secretary, Dr. Richard Kovacs, 236 East Sixty-Ninth Street, New York.

DR. F. B. WYNN of Indianapolis, President-Elect of the Indiana State Medical Association, is somewhat of a poet. At the annual outing of the Mazama Club (a mountain climbing club) held Aug. 10, 1914, the following was presented by Dr. Wynn as part of the regular program:

THE MOUNTAIN KING

By FRANCIS BARBOUR WYNN

Mightiest Mountain Height
Radiant by dazzling light
To thee we sing!
Clothed richly on this globe
Gorgeous thy snow-white robe
Splendor is thine abode;
We crown thee king!

Mazamas loud proclaim
Thy holy right to reign—
We tribute pay.
Thy claims are just and sure
Our love to thee is pure
It will for aye endure,
"Til Judgment Day.

Planted on Mother Earth
Whence sprang thy ruptured birth,
Thou standest there
Teaching posterity
Eternal verity
Through all eternity
To every heir.

No rule of space nor time
Canst measure thee, sublime
And mighty one!
Thou biddest man believe
Press forward and achieve,
Look up and then perceive
God's work well done!

Thy moods do awe inspire
Thy mantling clouds of fire,
Entrance our gaze!
Or veiled in mist and snow
Gathering storms that grow
Or raging winds that blow,
All doth amaze!

The crashing thunders round
Thy cragged sides resound—
The Earth doth quake.
Still keepest thou thy poise
Unmoved dost thou rejoice
'Mid all we hear thy voice,
"Be calm and wait."

From fissured tongues of ice
Swift torrent streams arise
To bathe thy feet;
Then thread through forests green,
Watering rich beds of sheen
Decked by the flowers that teem
With perfume sweet.

Thus mother-love seems cold
When childhood's fancies bold
The laws would break.
Yet from her mountain heart
The streams so pure that dart
Heed woman's holy art,
And man doth make.

On flows her nurturing stream
Through childhood's life its gleam
And into Youth;
Whilst on its banks there grow
Memory flowers that blow
With perfume sweet to know,
And teach the truth.

Glowing thy crest at dawn
Harbinger of the morn.
At break of day
Thou dost all animate,
Dispel the night of hate,
Our hearts regenerate
And teach to pray.

And by the dimming light
Or robed in sable night
Comes dreamy thought:
Charmed by thy mystic spell
Which over all doth dwell
And maketh each to tell
How wondrous wrought.

On wings of reverie
The soul from care set free
Swift takes its flight
The realms entrancing through
O'er fields of fancy new,
Fresh with the Heaven's dew—
Pure soul delight.

The avalanches roar;
Thy chasmed sides they gore—
'Tis awesome night!
Their crashing sounds sublime
Are but the words divine
Commanding us 'tis time
To search for light.

No less appalling life
In the ignoble strife,
'Twixt man and man;
The darkening night of sin
Hides monsters that do grin
At struggles deep within
And seek to damn.

Or in less horrid mien
Thief-like they rob the brain
Of judgment just:
Falsehood with face so fair—
Scarce see her lurking there
Yet with the net to snare
Confiding trust.

There grasping avarice stalks
Stifling his conscience, marks
The heart that feels:
Whilst myriads burdens bear
Heartaches and grinding care
Dark in the depths of despair
Dire want reveals.

But through the night of gloom
The Mount of Truth doth loom
To show the way
To erring, wilful, blind,
Passion-tossed human kind—
The love by Christ divined—
A better day.

Since publication of New and Nonofficial Remedies, 1914, and of the supplement to New and Nonofficial Remedies, 1914 (July 1, 1914), the following articles have been accepted for inclusion with "N. N. R.":

The Bayer Company, Inc.: Cymarin, Tablets Cymarin, Ampoules Cymarin Solution.

Maltine Co.: Maltine Malt Soup Extract.

H. K. Mulford Co.: Hypodermic Tablets of Emetine Hydrochloride, Antidysenteric Serum in vials containing 50 Cc., Antipneumococcic Serum, Polyvalent, syringes containing 20 Cc. and

vials containing 50 Cc. Antistreptococcic Serum, Polyvalent, vials containing 50 Cc., Antistreptococcic Serum, Scarlatinal, Polyvalent, vials containing 50 Cc., Typho-Serobacterin Mulford, Immunizing, syringes containing 1,000, 2,000 and 2,000 million killed sensitized typhoid bacilli.

Schieffelin and Co.: Typhoid Combined Vaccine (Prophylactic), vials and syringes containing three doses, 500 million killed typhoid bacilli and 250 million killed paratyphoid bacilli A and 250 million killed paratyphoid bacilli B, while the second and third dose each contain 1,000 million killed typhoid bacilli and 500 million each of killed paratyphoid bacilli A and A.

E. R. Squibb and Sons: Acne Vaccine, boxes of 4 syringes containing 25, 50, 100 and 200 million killed bacilli, boxes of 2 syringes containing 50 and 200 million killed bacilli, boxes of 6 ampoules containing 10, 25, 50, 100, 200 and 500 million killed bacilli, with syringes, and boxes of 3 ampoules containing 50 and 200 million killed bacilli with syringe. Bacillus Coli Communis Vaccine, boxes of 4 syringes containing 100, 200, 500 and 1,000 million killed bacilli. Also boxes of 2 syringes containing 100 and 500 million killed bacilli and boxes of 2 ampoules containing 100 and 500 million killed bacilli, with a syringe. Bacillus Pertussis Vaccine, boxes of 4 syringes containing 25, 50, 100 and 200 million killed bacilli. Also boxes of 2 syringes containing 50 and 200 million killed bacilli. Boxes of 6 ampoules containing 25, 50, 100, 200, 300 and 500 million killed bacilli, with a syringe and boxes of 2 ampoules containing 50 and 200 million killed bacilli, with a syringe. Diphtheria Antitoxin, syringes containing 2,000, 3,000, 4,000, 5,000, 7,500 and 10,000 units. Gonococcus Vaccine, 4 syringes containing 100, 200, 350 and 500 million killed gonococci, boxes of 2 syringes containing 100 and 500 million killed gonococci. Boxes of 6 ampoules containing 50, 100, 150, 350, 500 and 1,000 million killed gonococci, with a syringe and boxes of 2 ampoules containing 100 and 500 million killed gonococci, with a syringe. Meningococcus Vaccine, Curative, boxes of 4 syringes containing 100, 200, 400 and 500 million killed meningococci. Also boxes of 2 syringes containing 100 and 500 million killed meningococci. Boxes of 6 ampoules containing 100, 100, 500, 500, 1,000 and 1,000 million killed meningococci, with a syringe, and boxes of 2 ampoules containing 100 and 500 million killed meningococci, with a syringe. Meningococcus Vaccine, Immunizing, boxes of 3 syringes containing 100, 500 and 1,000 million killed meningococci. Pneu-

mococcus Vaccine, boxes of 4 syringes containing respectively 100, 200, 400 and 500 million killed pneumococci, boxes of 2 syringes containing respectively 100 and 500 million killed pneumococci, boxes of 6 ampoules containing 100, 100, 500, 500, 1,000 and 1,000 million killed pneumococci, with a syringe, and boxes of 2 ampoules containing 100 and 500 million killed pneumococci, with a syringe. Pyocyaneus Vaccine, boxes of 4 syringes containing 100, 200, 500 and 1,000 million killed bacilli. Also in boxes of 2 syringes containing 100 and 500 million killed bacilli. Small-pox (Variola) Vaccine (Glycerinated), each dose in separate aseptic sealed glass tube, with bulb and needles. Boxes of 5 and 10 tubes. Staphylo-Acne Vaccine, boxes of 4 syringes containing 100 million killed staphylococci and 25 million killed acne bacilli, 200 million killed staphylococci and 50 million killed acne bacilli, 400 million killed staphylococci and 100 million killed acne bacilli, and 500 million killed staphylococci and 200 million killed acne bacilli; boxes of two syringes containing 100 million killed staphylococci and 50 million killed acne bacilli and 500 million killed staphylococci and 200 million killed acne bacilli, boxes of 2 ampoules containing 100 million killed staphylococci and 50 million killed acne bacilli and 500 million killed staphylococci and 200 million killed acne bacilli, with a syringe. Staphylococcus Vaccine, boxes of 4 syringes containing 100, 200, 500 and 1,000 million killed staphylococci. Also boxes of 2 syringes containing 100 and 500 million killed staphylococci. Boxes containing 6 ampoules containing 100, 250, 500, 500, 1,000 and 2,000 million killed staphylococci, with a syringe, and boxes of 2 ampoules containing 100 and 200 million killed staphylococci, with a syringe. Streptococcus Vaccine, boxes of 4 syringes containing 100, 200, 500 and 1,000 million killed streptococci. Also boxes of 2 syringes containing 100 and 500 million killed streptococci. Boxes of 2 ampoules containing 100 and 500 million killed streptococci, with a syringe. Typhoid Vaccine, Curative, boxes of 4 syringes containing 100, 200, 500 and 1,000 million killed bacilli. Also boxes of 2 syringes containing 100 and 500 million killed bacilli. Boxes of 6 ampoules containing 200, 200, 500, 500, 1,000 and 1,000 million killed bacilli, with a syringe and boxes of 2 ampoules containing 100 and 500 million killed bacilli, with a syringe. Typhoid Vaccine, Immunizing, boxes of 3 syringes containing 500, 1,000 and 1,000 million killed bacilli.

Waukesha Health Products Co.: Hepeo Flour, Hepeo Dodgers, Hepeo Grits.

CORRESPONDENCE

PRAISE FOR THE JOURNAL

CHICAGO, Sept. 12, 1914.

Dear Dr. Bulson:—Congratulations on the September 15 issue of THE JOURNAL of the Indiana State Medical Association. It is a credit to everyone connected with it. You are certainly giving the Indiana men a journal of which they should be proud, and I want you to know I think so. Sincerely yours,

GEORGE H. SIMMONS.

BLAMES THE PRINTER FOR ERROR IN NEWSPAPER ADVERTISING

FORT WAYNE, Oct. 5, 1914.

To the Editor:—In the August number of THE JOURNAL a criticism appeared regarding the use of Oxygene machines for advertising purposes in which you implied that I had used a fictitious testimonial from the secretary of the Crawford County Medical Society of Crestline, Ohio. In defense of myself I desire to state that the testimonial which I used was genuine, and I still have the original letter in my possession, but by an inadvertence it was signed "Dr. J. A. Crawford" instead of "Dr. J. A. Agnew."

Yours truly,

H. O. WELLS.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION

Sixty-Fifth Annual Session
Lafayette, Ind., Sept. 24-25, 1914

The session was called to order Thursday, September 23, at 9:30 a. m., in the auditorium of the Second Presbyterian Church, by the President, J. P. Salb of Jasper. The invocation was pronounced by Rev. E. W. Dunlavy, pastor of Trinity Church.

REV. DUNLAVY: O God our Father, we are glad to come before Thee this morning with perhaps a newer and deeper emphasis than in any age that is past on the fact that Thou are the God of all life and of all being. And as this great and representative assemblage of men who are interested in the work of the uplift of humanity come together this morning, we are glad that they pause a moment to ask Thy blessing on all their deliberations. We thank Thee this morning for all that that implies for the deeper relationship of the work for humanity with the great spiritual movements of the world, and we pray Thee this morning that Thou wilt bless each and every one of these men, and in the wonderful work that each of them is called to do may he remember that the influence of his own personality goes beyond his professional training into the realm of personality and character, and the influence of mind on mind and

spirit on spirit, for the betterment or for the worse relationships in the great moral realm in which we all live. Bless each one of these men who speak today; be with them in their deliberations; go with them when they return to their own field of work; and grant that they may be touched with a sense of their spiritual responsibility. We ask all these things in His dear Name, Amen.

PRESIDENT SALB: We have with us this morning the Hon. Daniel Flanagan, who, representing the mayor of Lafayette, will deliver the Address of Welcome.

HON. DANIEL FLANAGAN: *Mr. President, Officers and Members of the Indiana State Medical Association:* On behalf of the mayor of our city, who has been unavoidably detained from being here this morning, and on behalf of our people, I wish to extend to each and every one of you a sincere welcome to our city. We appreciate to the utmost the great honor and distinction that you have paid us by making our city the place for your meeting on this occasion, for I know of no profession in the State of Indiana, or in this nation of ours, or in the world, that stands higher than does yours. I know of no body of men and women to whom humanity is more indebted than to you. I know of no men nor women who are called on as often to render individual and personal service than you are, and I know of no class of people who respond more readily and sincerely to the call of suffering humanity than do you.

When we reflect on the grandeur of your profession, humanity realizes the importance of the bond that exists between you and us. In the morning of life, who is the first to take care of us?—who is it that stands by, eyes fixed on us, to administer the first aid? And then as the noon-time of life comes on we depend on you to prepare us physically to meet the great responsibilities and duties of life; and in the vesper-time, when we are growing tired and weary of life's responsibilities, who is it but you who stand by us and with cheerful voice and happy countenance make the passing from this side to the other side of the River painless?

My friends, I am mighty glad this morning to have the opportunity of paying, as best I can, a tribute to those who so richly deserve it. I hope that your meetings here in this city will be fruitful of good to your Association, and consequently fruitful to us all; that when your labors here are over and your work has been completed, you may leave our little city, with some good and lasting impressions of it and of the people, and when you return to your various homes may you find your patients in as good condition and on the road to recovery as you hoped when you left them, and your families and your loved ones well and happy. (Applause.)

PRESIDENT SALB: Dr. Robert M. Campbell will deliver the address of welcome on behalf of the Tippecanoe County Medical Society of which he is president.

DR. ROBERT M. CAMPBELL: *Mr. Chairman and Members of the Indiana State Medical Association:* The representative of the city has told you how welcome you are in our midst, and representing the Tippecanoe County Medical Society, the membership of which always welcomes any doctor in our midst, I extend you a hearty welcome. The doors of the Tippecanoe County Medical Society are always open to any doctor, the latch-string is always out, either

to the State Association or to individual members passing through. Each member of the Tippecanoe County Medical Society wears a badge on the lapel of his coat, showing he is a member of the Reception Committee, and anything you wish to know, ladies and gentlemen—ask the Lafayette doctors; they can tell you where you want to go, when you want to go, how you want to go, and all about it. The chairman of the Committee on Arrangements informs me that everything possible was done up to the time of receiving you, and now that you are here we want to see that you have a most enjoyable time. I thank you. (Applause.)

PRESIDENT'S ADDRESS AND RESPONSE TO ADDRESSES OF WELCOME

PRESIDENT SALB: *Members of the Indiana State Medical Association:* In assuming the duties of president of this splendid organization I desire to express my keen appreciation of the great honor you have conferred on me. To be called on to represent such a body of honest laborers in a field that promises so much for the lives, health and happiness of the human race is an honor worthy of the ambition of any man. What you have accomplished is a matter of record in the world's progress, and stands as a monument to your indefatigable efforts, your daily sacrifices and your honest endeavors. I am therefore happy in being one of the profession represented by this gathering, and it gives me great pleasure to be with you on this occasion.

A noted writer has said, "Never forget that the only indestructible material in destiny's fierce crucible is character." Beauty, fame and money can not be carried beyond the horizon that shuts around this cradle of the world, but love, peace and truth are jewels which by their very nature survive the transit to the world beyond. It is on such a high plane that this Association has sought the solid rock to build its foundation, and on which its magnificent structure will rest secure for all time. All of you, by your inherent worth, have added to the stability of this structure. As a good example of our membership I refer to the late Dr. W. H. Wishard, who lived and was associated with us from the very beginning of our organization; a man whose sterling character and devotion to his profession gave him a high place among the people as well as his medical associates. His life and works can well stand as a guide and example for us all.

I welcome you as members of the most honored, important and useful profession in the world. The members of our profession ought to possess, in the very highest degree, all of the elements, physical, mental and moral, which go to make up the true man. It is my observation, and I believe is the general consensus of opinion, that the medical profession in Indiana, as a class, measures up more fully to all the qualifications of the true man than any other profession. There is no more confidential relation than that between the physician and the patient. There is no more tender relation than that which must exist between the physician or surgeon and the afflicted sufferer whom he has to treat. We therefore recognize the greatness and the importance of the profession which we represent, and the necessity of so conducting ourselves as to merit the confidence and respect that are so generally accorded us.

In the early days the true physician in Indiana was the man who practiced medicine under difficulties,

doing his work on horseback, carrying his small saddlebag and a few instruments, and not thinking of fee splitting, as some of our modern physicians do, attending to calls, day and night for rich and poor alike. He devoted his entire attention to the one thing, to relieve the human sufferer. To-day the true physician works under more advantageous circumstances, due to the world's progress in general, but the same high principles actuate him as actuated his predecessor of years ago. His mission is to relieve human suffering. The financial returns are not and should not be the only consideration. We all know that we must have some money, and that we must work for it. But what is there in riches? At a certain time the rich and the poor are alike; when the Reaper comes, rich and poor are treated alike. There is a class of people, the worthy poor, for whom the true physician not only prescribes gratuitously but for whom he often furnishes food and money as well. But the satisfaction of helping these worthy poor is even greater than the satisfaction derived from fees obtained from the rich. The doctor who practices for fees only is not the true physician, for the poor people are entitled to our services and sympathy. We cannot ignore the unfortunate class and be true to the ideals of our profession. The heart that beats in the breast of the woman who is rich is no different from the heart that beats in the breast of the woman who bore Abraham Lincoln who was at one time in our state only a few miles from the place where I reside. We all know what Lincoln did for his country, and many a poor child born in a humble shack may become the light of his country.

To my notion the true physician is the man who devotes his entire attention to the practice of medicine. He lets politics alone, and he keeps away from environments which consume time that should be devoted to his profession. Spare time should be devoted to study in order to keep abreast of the times. During the last thirty years since I graduated, medical science has advanced so much that the man who has not kept pace with the progress is far behind the times and according to present day standards can not do justice to himself or his patients. To-day pathology is a science; anatomy and physiology have developed new truths; surgery and medical treatment have been revolutionized by the discovery of new diagnostic and remedial measures and the perfection of instruments of precision. The physician of to-day must be ever alert and studious if he keeps up with the procession of those who are qualified according to modern requirements.

But with all of our advancement there is still much to be learned, for there are some diseased conditions which we have failed to conquer, and the public must learn much about preventable diseases. We have typhoid fever, pneumonia, lockjaw, tuberculosis and many other diseases that we had years ago. Why is it that we have those same diseases year in and year out? Is it not because we have not done our full duty to the public by more widely and more forcibly disseminating information concerning the preventability of these diseases? The mortality rate in this state from typhoid fever, if reports are true, is higher than it should be. We know to-day, positively, that no death should occur, or very few, from typhoid fever. If reports are correct, we have a remedy that absolutely prevents typhoid fever. In the American Army in the Philippines, the mortality

rate from typhoid fever is none. Germany, England, India and Russia report that the immunizing serum absolutely prevents typhoid fever. As physicians, why should we not immunize the father, mother and children of each family in this great state and save annually the lives of our dear people who die from this horrible disease that saps the life from each victim until there is nothing left but skin and bone to be laid in the grave. Why should we not, as a learned body, come to the conclusion that there is a preventive treatment of this one disease which plays havoc in so many communities in this state. There is not one of you, my brethren, who would not willingly devote one hour of his time each day to immunize his friends and patients. The state of Indiana should be the first state that should have on her statute books a law that makes this compulsory, just as the preventive treatment for ophthalmia neonatorum is compulsory.

Tuberculosis is a curable disease in its early stages. Every doctor who hears my voice here to-day can diagnose tuberculosis in its early stages. Tuberculosis is doing its great work of destruction in this state. We know and have known for a number of years that the tubercle bacillus is the cause of tuberculosis, but as yet we have found no specific cure for the disease produced by this destructive organism. Study and observation have shown that the bacilli are indestructible when once organized in the living body; when once colonized and they find a home, they are there to stay.

There is but one way to prevent tuberculosis, and that is to destroy the bacilli outside of the human body. When the bacilli are once in the body, they are there to stay. We can prevent the bacilli from doing the damage that is being done to-day if we do the same with our tuberculous cases as we do with all infectious and contagious diseases. We know that if the bacillus makes its nest in a certain house in the community it will not rest until it has conquered the whole family; and everybody else that moves in the same house, with few exceptions, it will most likely put to death. Ordinarily, it will attack one at a time; it may start in at father or mother, then one child after another, then the visitor who goes to visit his sick relation. It is no respecter of persons, whether male or female, uncle or aunt, young or old, rich or poor, all alike will be attacked. The destruction of human life is so great from this cause that we are justified in adopting the most stringent preventive measures to stamp out the disease.

When we look over the information coming through published reports from the U. S. Public Health Service at New Orleans, we find that there is one other disease which is threatening this country. As late as August 29 the bubonic plague was found in twenty-two human cases, and the rodent plague has been found in seventy-four cases. More than 5,000 rats in the infected district have been caught by trap or poison. This goes to show that the Assistant Surgeon General, W. C. Rueker, is going to eliminate this dreadful bubonic plague which is spread by rats, and it is my belief that if the U. S. Public Health Service would handle the tuberculosis problem as thoroughly as it handles the bubonic plague problem, we would eventually be free from tuberculosis, and we would not have an annual loss of 4,000 lives in Indiana from tuberculosis as we do now.

Vaccination has eliminated fatality from small-pox in the state of Indiana. Vaccinate and revaccinate and you will stamp out small-pox entirely, and fifty years from now the medical text-books will speak of small-pox only as a disease that once was quite prevalent but finally became extinct as a result of preventive measures.

In conclusion I desire to call attention to what has been and is being done for the sick poor of Indiana. Possibly the first donation to the poor of the state was given by Dr. Bobbs of Indianapolis, one of the most eminent surgeons in the state of Indiana, and he made it possible to establish Bobb's Dispensary. This was a gift that was greatly needed in the city of Indianapolis, and one that was well patronized by not only the poor but by some of the better classes. But on July 14, 1914, there was dedicated the Robert W. Long Hospital of the Indiana University School of Medicine, a building ready and complete for patients, given by Dr. and Mrs. Long to the state. This is a gift without any strings attached to it, and is a model in hospital architecture. Its normal capacity is 106 beds. The city of Indianapolis and the physicians and surgeons all over this state can be proud of and will take the greatest interest in this magnificent gift which stands as a memorial to Dr. and Mrs. Robert W. Long. This thoroughly modern hospital and the Bobb's Dispensary make the Indiana University School of Medicine a clinical school, and graduates of this school may with pride say, "I am a graduate of the medical department of the Indiana University." That in itself will give the young man a standing in any community. In conjunction with the great hospitals that Indianapolis is supporting to-day, Indiana University will be on a plane with any of the well known institutions of learning.

Finally, this Association will do itself credit if it continues to encourage the study of disease and methods to cure or prevent them; to support the excellent medical school that is now under the control of the state; to aid in the dissemination of information to the public which shall aid in the prevention of disease; and to unflinchingly uphold and maintain the high moral and ethical principles which at present are the solid foundation on which our estimable organization stands.

HOUSE OF DELEGATES

FIRST MEETING

The first regular meeting of the House of Delegates, Lafayette session, 1914, convened at 7:00 p. m., September 23, at the Lincoln Club, Lafayette, with President Salb in the chair. The minutes of meetings held at West Baden, 1913, were read and approved.

Motion was made and carried that the committee reports as printed in *THE JOURNAL* be acted on without reading, but allowing the chairman or secretary to make any verbal explanations.

The report of the secretary was accompanied by a communication from the Council as follows:

"The Council of the Indiana State Medical Association recommends to the House of Delegates an appropriation sufficient to provide a dinner to be given to the county secretaries in connection with the annual Secretaries' Conference, and as this conference is the training school of the men who have to build up the organization, the officers of the State Association should be included."

The report of the secretary was adopted, as also the recommendation from the Council, and an appropriation to cover the cost of a dinner for the county secretaries and officers of the State Association who attend the secretaries' conference was authorized.

The report of the treasurer was read in detail, the treasurer explaining that the report as published in *THE JOURNAL* was a condensed report. The report as read was accepted and referred to the auditing committee.

Reports of the different committees appointed by the president were accepted as printed in *THE JOURNAL*, with the exception of the report of the Committee on Pathology which recommended an appropriation. It was moved and carried that final action on the report of the Committee on Pathology come up at the Friday morning meeting.

It was moved and carried that a resolution be prepared by the Committee on Public Policy and Legislation, opposing the passage of the Harrison Bill, and that the resolution, drawn in the form of a petition, be signed as far as possible by every member in attendance at this session of the Association and afterward sent to the Indiana senators and congressmen now in office.

The Ninth District Medical Society officially presented the following for adoption:

"No member shall read a paper at an annual session of the Indiana State Medical Association who has not read a paper before his county medical society within the previous two years."

Motion was made and carried that it be adopted.

A communication from the Fort Wayne Medical Society asked that the House of Delegates act on the suggestion that the various candidates for the coming state legislature be asked to sign the following pledge or one similar to it:

"If elected to the Indiana Legislature I will do my utmost to maintain one standard for all practitioners of medicine, and will use my influence to defeat any legislation the object of which is to permit any cult to practice medicine on a standard of medical education lower than the standards of those already in the field, under the pretext that its followers are not practicing medicine. I shall at all times support medical legislation which is in the interest of the people of the state and not in the interest of any special cult or school of practice."

On motion, duly seconded, the suggestion of the Fort Wayne Medical Society was adopted.

The secretary proposed a number of changes in the present by-laws, and the same were received and laid on the table until the Friday morning meeting.

Adjourned.

CHARLES N. COMBS, Secretary.

SECOND MEETING

The second meeting of the House of Delegates, Lafayette session, met Friday, 8:00 a. m., in the lecture room of the Second Presbyterian Church. The meeting was called to order by President Salb, and the election of officers was the first order of business. The ballot resulted in the following officers being elected for the ensuing year:

President, Frank B. Wynn, Indianapolis.

First Vice-President, Edgar Cox, Kokomo.

Second Vice-President, L. W. Smith, Wabash.

Third Vice-President, W. J. Molloy, Muncie.

Secretary, Charles N. Combs, Terre Haute, (re-elected).

Treasurer, David W. Stevenson, Richmond, (re-elected).

Delegates to the American Medical Association for the ensuing two years, C. H. Good, Huntington, and Miles F. Porter, Fort Wayne; alternates, C. F. White, Danville, and A. M. Hayden, Evansville.

Member of the Medical Defense Committee to serve three years, A. E. Sterne, Indianapolis, (re-elected).

Place and date for the next session of the Association, Indianapolis, Thursday and Friday, Sept. 23 and 24, 1915.

Before proceeding to the next order of business, Dr. F. B. Wynn, President-Elect, was introduced. In accepting the position as president he pledged himself to maintain the affairs of the Association on righteous and high moral principles and to keep the Association progressive in the scientific spirit.

Dr. A. W. Brayton, Indianapolis, in announcing the illness of Dr. Potter, one of the older members of the Association, introduced the following:

"For the past twenty-five years Dr. Theodore Potter of Indianapolis, has been an active participant in the proceedings of the Indiana State Medical Association. Fresh from the laboratories of Koch, he came to the Association bringing the most advanced knowledge of bacteriology in its practical relationship to medicine and surgery. In laboratory demonstrations and reports on scientific advancement in medicine he brought to the Association during the early awakening in this field, knowledge which was of the highest benefit to all the members. Later his reports on tuberculosis in all its aspects gave the most perfect digest on this great problem, including the latest and best that could be said concerning the nature and treatment of this malady in its multifarious lesions. In view of his conspicuous service to the Association, and owing to serious illness which prevents his attendance at this meeting, Be it

"*Resolved*, that it is the sense of the Indiana State Medical Association that the deepest sympathy of those here assembled be extended to Dr. Potter and his family, and likewise an earnest and trustful hope for his recovery.

On motion, duly seconded, the resolution was unanimously adopted.

The report of the Committee on Pathology was read and adopted, carrying with it an appropriation of \$200 or such portion of that amount as found necessary for conducting the scientific exhibit, and the awarding of prizes as recommended by the committee.

Dr. W. N. Wishard, as chairman of the Committee on Legislation and Public Policy, introduced the following resolution:

WHEREAS, at various times in the past there have been placed among the statutes of this state a number of separate and distinct laws relating to the purity of drugs; the manufacture, handling and sale of medicine; weighing and measuring drugs; the administration of narcotics; labeling medicine; the sale of liquor for medicinal purposes; registration of poison; the practice of medicine; the practice of dentistry; the practice of nursing; the practice of pharmacy; public health generally; and

WHEREAS, all of these laws concern in some degree every physician in the state; some are devoted almost entirely to the physician; some have, no doubt, accomplished the purposes for which they were enacted, and others should be supplemented by measures which take present day conditions into account; the enforcement of these laws concerned, with related subjects, has been committed to different boards which have made various rules and regulations which, to all intents and purposes, are equal in authority to the laws themselves; and court decisions have also been added

to this mass of legislation, these subjects should receive comprehensive study and thorough consideration. Special education and technical and professional experience are necessary for an understanding of the subject matter of some of these laws. Ample time for the thorough consideration of the details of these complex matters should be given. Ill consideration or hastily enacted legislation is nearly always injurious to the public; and

WHEREAS, a thorough study of these numerous laws, rules and regulations and decisions by an able commission appointed by the state and having authority to codify these statutes, etc., and recommend supplementary legislation should be productive of good, and

WHEREAS, many of the best features of this mass of legislation have originated in the Indiana State Medical Association, Therefore Be It

Resolved, that the Indiana State Medical Association request the governor of Indiana to recommend to the legislature assembling in 1915 the enactment of such legislation as will secure the appointment of a commission of experts to review and codify the foregoing subjects, and that such commissions be directed to report in full to the legislature convening in 1917, and that said commission also be directed to recommend in its report such amendments, modifications or changes in existing laws as its investigation may suggest, and that all excepting imperatively necessary legislation on these subjects be deferred pending the report of said commission."

On motion, duly seconded, this resolution was adopted.

Dr. W. R. Davidson of Evansville, stated that in view of the fact that there was some misunderstanding as to when the terms of officers of the Association begin, he desired to offer the following amendment to the constitution:

"The officers, except the councilors, shall be elected annually and shall serve for the next fiscal year following the annual session. The councilors shall take office the following January 1st after being elected by their respective district societies and shall serve for three fiscal years."

This amendment was received, ordered printed in THE JOURNAL to come up for final action at the next annual session.

It was moved and carried that the various changes in the by-laws proposed by the secretary be printed in full in THE JOURNAL so that an intelligent vote may be obtained at the next annual meeting of the House of Delegates.

Dr. Alexander R. Craig of Chicago, secretary of the American Medical Association, was a visitor and was introduced by the president. He paid a tribute to our Association in saying that Indiana is in entire sympathy with the high ideals advocated by the American Medical Association. He congratulated us on the position which we have always taken when questions concerning professional and ethical standards were involved.

An extract from *The Lafayette Daily Courier* was read, stating that it was to be the policy of that publication to refuse disreputable medical advertising. A motion was made and carried to the effect that the House of Delegates commend *The Lafayette Daily Courier* for its action, with endorsement of the same.

A rising vote of thanks was tendered the members of the Tippecanoe County Medical Society for the entertainment, splendid and complete in every detail, which they afforded the Association at this annual session.

Adjourned.

CHARLES N. COMBS, Secretary.

THE COUNCIL

FIRST MEETING

The regular meeting of the Council of the Indiana State Medical Association was held at the Lahr House, Lafayette, Sept. 23, 1914, at 3:00 p. m., Chairman Davidson presiding.

Roll call was responded to by Drs. Davidson, Heitger, Stemm, Weinstein, Kemper, Osborne, Salb, Bulson and Combs. Drs. Nesbit, Stoltz and Terry were also present.

The councilors made favorable reports concerning the activities of the societies in the various councilor districts.

Dr. Bulson made his report concerning the management of the official publication, *THE JOURNAL*, and said that notwithstanding the increased size of *THE JOURNAL*, the increased circulation to comply with the organization plans of the American Medical Association, and the increased cost of publication, he would be able to continue *THE JOURNAL* without charging the Association more than it is now paying, namely 75 cents per year per member. He volunteered the information that any increase in the income from advertising was devoted to enlarging and improving *THE JOURNAL* and made a plea for more extensive patronage of advertisers in order to encourage continuance of advertising contracts.

The council, in continuing Dr. Bulson as editor and manager of *THE JOURNAL*, reiterated the sense of former resolutions that have been passed from time to time in which the policies and principles under which *THE JOURNAL* is conducted, were endorsed.

Dr. Bulson had just returned from addressing the Conference of Secretaries of the Pennsylvania State Medical Association at a dinner given them by their Association. As Pennsylvania and many other states have found it a profitable investment to furnish a dinner to the county secretaries, Dr. Bulson thought that Indiana should follow the example, and accordingly he introduced the following:

"The Council recommends to the House of Delegates an appropriation sufficient to provide a dinner to be given to the county medical society secretaries in connection with the annual secretaries' conference, and as this meeting is the training school for the men who keep up medical organization, the officers of the State Association should be included."

On motion, this recommendation was duly carried and referred to the House of Delegates.

Adjourned.

CHARLES N. COMBS, Secretary.

SECOND MEETING

The Council of the Indiana State Medical Association. La Fayette session, met for its final meeting at 10:30 a. m., Friday, September 25, 1914, with the following present: Drs. Wishard, Weinstein, Davidson, Kemper, Bulson and Combs. Dr. D. W. Stevenson, treasurer, and Dr. Osborne, retiring councilor, were also present.

The election of a chairman resulted in the selection of Dr. W. R. Davidson of Evansville. He appointed Drs. Tucker and Weinstein as members of the auditing committee. The chairman also appointed Drs. Kemper and Combs as a temporary auditing committee to examine Treasurer Stevenson's accounts, and they reported his bank book properly balanced and all checks accounted for.

Dr. G. W. H. Kemper presented a Digest and Biographical Index of the Scientific Work of the Associa-

tion since its inception. At a previous meeting of the House of Delegates this Index was accepted and ordered printed at the expense of the Association. An honorarium of \$13, covering Dr. Kemper's actual expenses in the preparation of the Index, was voted him unanimously.

Adjourned.

CHAS. N. COMBS, Secretary.

THE SECRETARIES' CONFERENCE

The sixth annual conference of the county medical society secretaries, Lafayette session of the Association, was held September 24 at 8:30 a. m. A small attendance was present and the time was occupied in discussing informally the value of *THE JOURNAL* and the medical defense feature of the Association. As a number of the secretaries were not familiar with the blank to be filled out by the member contemplating calling on the Medical Defense Committee, a motion prevailed to have the secretary mail to each county secretary one of the blanks to be used in making necessary explanations.

Announcement was made of the action of the House of Delegates in appropriating money for the dinner to be given as a feature of the succeeding conferences. The secretary proposed that an organization be perfected, and as a result Dr. E. M. Shanklin of Hammond, was elected president, and Dr. Earl Van Reed of Lafayette, secretary for the coming year.

CHARLES N. COMBS, Secretary.

REGISTRATION AT LAFAYETTE SESSION

MEDICAL SECTION

- | | |
|-----------------------------------|----------------------------------|
| Clarence Abbott, Ottwell. | J. C. Burkle, West Lafayette. |
| D. S. Adams, Beech Grove. | J. R. Burlington, Attica. |
| H. R. Alburger, Indianapolis. | Severance Burrage, Indianapolis. |
| J. C. Anderson, Indianapolis. | E. R. Bush, Indianapolis. |
| T. O. Armfield, Elwood. | G. F. Butler, Attica. |
| Max A. Armstrong, Lebanon. | R. A. Butler, Beech Grove. |
| Geo. E. Baker, Attica. | W. F. Butler, Cayuga. |
| Clay A. Ball, Muncie. | V. V. Cameron, Marion. |
| J. R. Ball, Lebanon. | R. M. Campbell, Lafayette. |
| M. J. Barry, Indianapolis. | C. A. Carter, Indianapolis. |
| Clancy Bassett, Thornton. | I. M. Casebeer, Newport. |
| J. W. Baxter, New Albany. | O. U. Chenoweth, Otterbein. |
| G. F. Beasley, Lafayette. | N. W. Clark, Rossville. |
| F. M. Biddle, Battle Ground. | A. C. Clauser, Delphi. |
| Chas. R. Bird, Greensburg. | Albert M. Cole, Indianapolis. |
| A. J. Blickenstaff, Wolcott. | C. C. Collins, Roachdale. |
| H. G. Bloom, Oxford. | C. N. Combs, Terre Haute. |
| L. A. Bolling, Attica. | P. W. Conway, Delphi. |
| Chas. S. Bond, Richmond. | C. E. Cottingham, Indianapolis. |
| E. R. Borley, South Bend. | S. M. Cotton, Goldsmith. |
| H. M. Bounnell, Wayne-town. | L. E. Cox, Greenwood. |
| J. V. Bower, Indianapolis. | C. C. Crampton, Delphi. |
| Whitefield Bowers, Michigan City. | L. G. Cromer, Union City. |
| A. W. Brayton, Indianapolis. | J. E. Cullipher, New Maysville. |
| R. W. Brookie, Converse. | F. S. Cuthbert, Kingman. |
| G. W. Brown, Frankfort. | C. R. Dancer, Ft. Wayne. |
| G. G. Brudi, New Haven. | G. R. Daniels, Marion. |
| G. M. Buck, Burrows. | W. P. Darroch, Cayuga. |
| C. T. Bundy, Earl Park. | E. J. Davis, Mooreland. |
| Louis Burckhardt, Indianapolis. | C. V. Davison, West Lafayette. |
| A. E. Burkhardt, Tipton. | Fred A. Dennis, Crawfordsville. |
| | J. F. Dickes, Portland. |
| | A. S. Dickey, Tipton. |

- W. T. S. Dodds, Indianapolis.
 Claude Dollens, Oolitic.
 Walter A. Domer, Wabash.
 C. W. Dowden, West Baden.
 L. J. Downey, Vincennes.
 L. P. Drayer, Ft. Wayne.
 C. C. Driscoll, Lafayette.
 J. W. Duckworth, Indianapolis.
 T. J. Dugan, Indianapolis.
 F. W. Dunn, Gaston.
 S. E. Earp, Indianapolis.
 J. W. Eidson, Plymouth.
 L. D. Eley, Plymouth.
 E. C. English, Rensselaer.
 Wm. Enslen, Ft. Wayne.
 L. H. Eshleman, Marion.
 E. E. Evans, Gary.
 H. D. Fair, Muncie.
 W. A. Fankboner, Marion.
 Chas. J. Finney, Attica.
 F. B. Fisk, Indianapolis.
 O. M. Flaek, Boswell.
 R. M. Foster, Russellville.
 J. P. Galbreth, Burnetts Creek.
 J. D. Garrett, Indianapolis.
 E. R. Gibbs, Wilkinson.
 Jas. L. Gilbert, Logansport.
 Chas. H. Good, Huntington.
 Wm. O. Gossett, Brookston.
 H. E. Grishaw, Tipton.
 W. L. Grossman, North Vernon.
 A. E. Guedel, Indianapolis.
 H. J. Hall, Franklin.
 H. M. Hall, New Carlisle.
 J. E. Hall, Alexandria.
 A. A. Hamilton, Marion.
 E. Hawkins, Greencastle.
 H. W. Held, Vincennes.
 Alfred Henry, Indianapolis.
 Robert Hessler, Logansport.
 L. F. Hicks, Stilesville.
 E. I. Hinkle, Goldsmith.
 G. E. Hoffman, Rochester.
 C. F. Holtzendorff, Plymouth.
 Walter D. Hoskins, Indianapolis.
 H. H. Hubbard, Boswell.
 Chas. D. Humes, Indianapolis.
 J. N. Hurty, Indianapolis.
 Seth Irvin, Summitville.
 P. S. Johnson, Sheridan.
 W. A. Johnson, Perryville.
 M. F. Johnston, Richmond.
 T. A. Kearns, Flora.
 G. W. H. Kemper, Muncie.
 A. R. Kerr, Mollott.
 Jane M. Ketcham, Indianapolis.
 G. D. Kimball, Marion.
 A. C. Kimberlin, Indianapolis.
 J. E. King, Richmond.
 J. C. Kirkpatrick, Roll.
 F. E. Kiser, Indianapolis.
 W. W. Kneale, Anderson.
 E. S. Knox, Indianapolis.
 A. R. Kresler, Rensselaer.
 D. H. Laird, Oxford.
 M. M. Lairy, Lafayette.
 H. K. Langdon, Indianapolis.
 Geo. W. Lee, Lafayette.
 C. E. Leedy, Pierceton.
 E. J. Libbert, Aurora.
 E. C. Lidikay, Ladoga.
 D. S. Linvill, Columbia City.
 W. A. Lofland, W. Lafayette.
 C. R. Long, Pierceton.
 F. A. Loop, Lafayette.
 U. A. Lyle, Lafayette.
 O. R. Lynch, Peru.
 W. F. McBride, Dayton.
 M. T. McCarty, Frankfort.
 O. L. McCay, Romney.
 D. C. McClelland, Lafayette.
 F. V. Martin, Michigan City.
 Ross Martin, Kokomo.
 H. C. Martindale, Pendleton.
 D. E. Mavity, Fowler.
 E. T. Mitchell, Romney.
 W. R. Moffitt, Lafayette.
 W. J. Molloy, Muncie.
 F. B. Morgan, Huntington.
 J. S. Morrison, Lafayette.
 R. D. Morrow, Richmond.
 H. M. Mugg, Clarks Hill.
 H. Y. Mullin, Rockfield.
 E. B. Mumford, Indianapolis.
 A. W. Myers, Monroe City.
 Burton D. Myers, Bloomington.
 O. B. Nesbit, Valparaiso.
 C. F. Neu, Indianapolis.
 S. C. Newlin, Anderson.
 T. W. Oberlin, Hammond.
 H. N. Oliphant, Forest.
 Claude B. Paynter, Campbellsburg.
 N. F. Peacock, Darlington.
 E. E. Parker, Culver.
 R. J. Pierce, Richmond.
 I. E. Perry, North Manchester.
 H. J. Pierce, Cloverland.
 Allen Pierson, Spencer.
 M. R. Pollom, Stockwell.
 W. R. Quick, Delphi.
 F. E. Radcliffe, Bourbon.
 E. Randall, Ambia.
 A. L. Ratcliff, Kingman.
 R. M. Reagan, Monon.
 J. H. Reed, Logansport.
 R. E. Repass, Indianapolis.
 B. W. Rhamy, Ft. Wayne.
 J. W. Ricketts, Indianapolis.
 W. H. Ristine, Crawfordsville.
 F. H. Robinson, Delphi.
 H. C. Robinson, Martinsville.
 J. E. Robison, Frankfort.
 L. F. Ross, Richmond.
 C. L. Rowland, West Point.
 E. Ray Royer, No. Salem.
 C. P. Rumyan, Elwood.
 J. W. Shafer, Lafayette.
 W. J. Sandy, Martinsville.
 O. T. Seamahorn, Pittsboro.
 E. Schaible, Lafayette.
 A. W. Schreiber, Lafayette.
 R. P. Schuler, Kokomo.
 O. V. Schuman, Columbia City.
 Ada E. Schweitzer, Indianapolis.
 J. Wm. C. Scott, Columbia City.
 Will Shimer, Indianapolis.
 E. R. Sisson, Greenfield.
 J. N. Sloan, Spencer.
 C. L. Slonaker, Leiters Ford.
 W. A. Smith, Otterbein.
 Chas. R. Sowder, Indianapolis.
 W. A. Spencer, Wolcott.
 W. C. Stephens, Muncie.
 Albert E. Sterne, Indianapolis.
 A. E. Stinson, Athens.
 C. N. Stroube, Roachdale.
 C. C. Stroup, Bloomington.
 F. V. Stucky, Gosport.
 O. H. Swantusch, Metz.
 E. M. Sweet, Martinsville.
 A. A. Swope, Crawfordsville.
 J. H. Taylor, Indianapolis.
 W. H. Taylor, Ambia.
 R. S. Tea, Lafayette.
 F. W. Terflinger, Logansport.
 W. H. Terrell, Pittsboro.
 O. P. Terry, Lafayette.
 F. B. Thompson, Lafayette.
 F. F. Thompson, Madison.
 G. R. Tubbs, West Point.
 E. Van Reed, Lafayette.
 G. Van Sweringen, Ft. Wayne.
 W. W. Wadsworth, Muncie.
 R. H. Wagoner, Colburn.
 J. P. Ward, Vevay.
 S. S. Washburn, Lafayette.
 B. P. Weaver, Ft. Wayne.
 J. C. Webster, Lafayette.
 O. F. Wellenreiter, Gessie.
 Chas. A. White, Danville.
 G. T. Williams, Crawfordsville.
 L. O. Williams, Anderson.
 M. C. Wilson, Lafayette.
 J. A. Work, Sr., Elkhart.
 B. Frank Wray, Camden.
 D. C. Wybourn, Ossian.

SURGICAL SECTION

- H. R. Allen, Indianapolis.
 C. E. Angell, Delphi.
 A. C. Arnett, Lafayette.
 W. H. Baker, South Bend.
 P. J. Barends, Crawfordsville.
 Jno. F. Barnhill, Indianapolis.
 C. P. Barrett, Mt. Vernon.
 C. O. Bechtol, Marion.
 Herma Beck, Lebanon.
 J. B. Berteling, South Bend.
 E. G. Blinks, Michigan City.
 H. K. Bonn, Indianapolis.
 M. A. Boor, Terre Haute.
 M. F. Boulden, Frankfort.
 C. K. Bruner, Greenfield.
 N. A. Cary, Crawfordsville.
 F. R. Charlton, Indianapolis.
 Chas. Chittick, Frankfort.
 S. A. Clark, South Bend.
 M. R. Combs, Terre Haute.
 Geo. J. Cook, Indianapolis.
 Edgar Cox, Kokomo.
 M. L. Curtner, Vincennes.
 E. C. Davidson, Lafayette.
 W. R. Davidson, Evansville.
 H. A. Duemling, Fort Wayne.
 J. Rilus Eastman, Indianapolis.
 T. B. Eastman, Indianapolis.
 G. G. Eckhart, Marion.
 C. H. English, Ft. Wayne.
 Bernhard Erdman, Indianapolis.
 J. H. Ford, Indianapolis.
 V. A. Funk, Vincennes.
 W. D. Gatch, Indianapolis.
 W. S. Grayston, Huntington.
 Geo. R. Green, Muncie.
 F. G. Grisier, Columbia City.
 E. H. Griswold, Peru.
 M. D. Gwin, Rensselaer.
 M. N. Hadley, Indianapolis.
 H. G. Hamer, Indianapolis.
 R. V. Hannell, Lafayette.
 S. J. Hatfield, Indianapolis.
 Geo. D. Haworth, Noblesville.
 A. M. Hayden, Evansville.
 J. D. Hillis, Lafayette.
 W. F. Howat, Hammond.
 O. D. Hutto, Kokomo.
 G. B. Jackson, Indianapolis.
 Thos. M. Jones, Anderson.
 Bernays Kennedy, Indianapolis.
 T. C. Kennedy, Indianapolis.
 Chas. B. Kern, Lafayette.
 J. T. Kime, Petersburg.
 H. J. Laws, Lafayette.
 Goethe Link, Indianapolis.
 P. H. Linthicum, Evansville.
 L. C. Lukemeyer, Huntingburg.
 G. T. MacCoy, Columbus.
 Jas. N. McCoy, Vincennes.
 C. H. McCully, Logansport.
 Adah McMahan, Lafayette.
 E. J. McOscar, Ft. Wayne.

S. C. Markley, Richmond.
 Geo. D. Marshall, Kokomo.
 H. H. Martin, Laporte.
 H. G. Merz, Hammond.
 Chas. M. Mix, Muncie.
 Wm. H. H. Moore, Lafayette.
 E. B. Moser, Windfall.
 M. V. B. Newcomer, Tip-ton.
 J. H. Oliver, Indianapolis.
 Geo. R. Osborn, Laporte.
 R. C. Ottinger, Indianapolis.
 H. O. Pantzer, Indianapolis.
 J. A. Pfaff, Indianapolis.
 O. G. Pfaff, Indianapolis.
 M. F. Porter, Ft. Wayne.
 H. P. Preston, Plymouth.
 C. E. Quinn, Burlington.
 A. P. Rainier, Remington.
 J. P. Ramsey, Vincennes.
 L. T. Rawles, Ft. Wayne.
 J. V. Reed, Indianapolis.
 Geo. Revis, Lafayette.
 Granville Reynard, Union City.
 E. W. Rine, Winchester.
 A. P. Roope, Columbus.
 David Ross, Indianapolis.
 E. B. Ruschi, Lafayette.
 J. P. Salb, Jasper.
 G. A. Schultz, Lebanon.
 W. D. Schwartz, Portland.
 W. Shafer, Rochester.
 H. E. Sharrer, Hammond.
 L. O. Sholty, Wabash.
 Jno. W. Sluss, Indianapolis.
 L. F. Schmauss, Alexandria.
 L. W. Smith, Lafayette.
 Lorin W. Smith, Wabash.
 C. L. Souder, Columbia City.
 W. H. Stemm, North Vernon.
 Chas. Stoltz, South Bend.
 C. E. Stone, Shoals.
 H. W. Taylor, Rochester.
 S. F. Teaford, Paoli.
 C. C. Terry, South Bend.
 G. K. Throckmorton, Lafayette.
 I. N. Trent, Muncie.
 R. E. Troutman, Logansport.
 B. Van Sweringen, Ft. Wayne.
 Edwin Walker, Evansville.
 Jos. H. Weinstein, Terre Haute.
 A. B. Westfall, Lafayette.
 R. B. Wetherill, Lafayette.
 W. H. Williams, Lebanon.
 W. F. Willien, Terre Haute.
 Wm. N. Wishard, Indianapolis.
 Jas. A. Work, Jr., Elkhart.
 Chas. L. Wright, Huntington.
 L. W. Yule, Logansport.
 J. R. Yung, Terre Haute.

EYE, EAR, NOSE AND THROAT SECTION

Chas. J. Adams, Kokomo.
 Jas. H. Black, Lebanon.
 L. D. Brose, Evansville.
 Albert E. Bulson, Jr., Ft. Wayne.
 M. M. Clapper, Hartford City.
 Wm. F. Clevenger, Indianapolis.
 W. N. Culmer, Bloomington.
 C. H. Emery, Bedford.
 B. B. Griffith, Vincennes.
 F. C. Heath, Indianapolis.
 Jos. D. Heitger, Bedford.
 H. B. Hill, Logansport.
 W. A. Hollis, Hartford City.
 T. C. Wood, Indianapolis.
 W. F. Hughes, Indianapolis.
 Chas. Hupe, Lafayette.
 J. M. Jackson, Aurora.
 Geo. F. Keiper, Lafayette.
 T. W. Kelsey, Attica.
 B. A. King, Cicero.
 A. B. Knapp, Vincennes.
 W. J. Leach, New Albany.
 Jas. McCall, Terre Haute.
 C. H. McCaskey, Indianapolis.
 J. L. McElroy, Aurora.
 O. W. McQuown, Marion.
 A. L. Marshall, Indianapolis.
 J. Maurer, Marion.
 H. L. Miller, West Baden.
 Jno. R. Newcomb, Indianapolis.
 F. V. Overman, Indianapolis.
 Lafayette Page, Indianapolis.
 S. Pearlman, Lafayette.
 F. McK. Ruby, Union City.
 E. M. Shanklin, Hammond.
 W. N. Sharp, Indianapolis.
 J. W. Smadel, Vincennes.
 H. Boyd-Snee, South Bend.
 F. A. Shoaf, Kokomo.
 A. L. Spinning, Covington.
 Geo. W. Spohn, Elkhart.
 D. W. Stevenson, Richmond.
 Jos. O. Stillson, Indianapolis.
 H. N. Swezey, Lafayette.
 Wm. S. Tomlin, Indianapolis.
 E. deWolfe Wales, Indianapolis.

Dr. George R. Green told of a patient with elephantiasis of the penis, who, when intoxicated, attempted to amputate the offending member with a sharp knife, severing every part but the urethra. Reparative surgery resulted in healing by first intention.

Dr. Miles F. Porter of Ft. Wayne delivered a splendid address, illustrated by anatomic and pathologic charts, on the "Surgery of the Thyroid." Dr. Porter introduced his lecture by citing several points on the embryology, anatomy and physiology of the gland. It is but recently that we fully realize the value of the ductless glands, of which the thyroid is one of the most important. It has its origin from three points, the base of the tongue and right and left visceral clefts. It is poorly supplied with lymphatics, but its blood-supply is remarkable, getting twenty-eight times as much as the brain in proportion to its size; moreover, the circulation is variable and capricious, changing perchance in an hour. The thyroid is not primarily a ductless gland, and is closely connected with the genital organs; is larger in the female; increases during menstruation, under sexual stimulation and pregnancy, and atrophies or degenerates after the menopause. It plays an important part in metabolism and is never seriously diseased without some derangement of other ductless glands. Congenital absence of the thyroid gives us the cretin. Hyposecretion later in life results in myxedema. The thyroid contains pavement, columnar and round cells with a connective-tissue base. Arrangement and function of these cells is responsible for either hypo or hyperthyroidism, and the cure of the condition consists in furnishing what the individual lacks.

The objects in surgery are two: to remove an unsightly mass and to relieve pressure and other symptoms. The operation is free from great danger and no real objections can be introduced. Enough tissue must be left to furnish ample secretion. Five-sixths can be safely removed, for Nature is lavish in the production of extra capacity, not only in the thyroid but in other glands and organs. If for any reason all of the gland must be or is removed, the patient must be fed thyroid in some form. Several points in thyroid surgery that must be observed are the necessity of a wide incision for free access; the line of muscular sutures must not lie directly under those of the skin; the blood-supply of the parathyroid must not be disturbed, and great care must be exercised in securing complete hemostasis. Graves and others in their classical description of a case gave the terminal symptoms. After a patient has reached this typical stage, he is probably never cured. An early operation is necessary for good results. Ligation is rarely satisfactory, for circulation is speedily restored. Boiling water, injected, destroys all the cells with which it is brought in contact, and may be used when the radical operation may not be performed; but the water must go into the hyperactive tissue. Local enlargements are always satisfactorily treated in this way. Lobectomy is not curative unless the other lobe is free from disease.

As our ability to early recognize changes in the thyroid increases and our knowledge of therapeutic measures advances, the field of surgery will grow smaller and smaller.

In the discussion that followed it was asserted that removal of the parathyroids nearly always resulted in tetany.

DELAWARE COUNTY

The regular meeting of the Delaware County Medical Society was held in the lecture room of the Muncie Public Library, Friday, September 4, with President D. M. Green, M.D., in the chair.

Liberal doses of thyroid will often relieve the pernicious vomiting of pregnancy.

Neurasthenia and neuralgia are often due to disordered function of the thyroid.

Adjourned. H. D. FAIR, Secretary.

ELKHART COUNTY MEDICAL ASSOCIATION

September session called to order at 8:30 p. m. on the 3d by President Ash in Dr. Stauff's office, Elkhart.

Minutes of May meeting read and approved. Treasurer made a full report of moneys received and disbursed since Jan. 1, 1914, and showed a balance of \$18.49. All bills as read were allowed by vote of the society.

Motion made and carried that the names of four members delinquent in their dues should be referred to the Board of Censors. The same board is asked to report on the matter of honorary membership; who, if any one is eligible to be elected to honorary membership, and who shall pay the state dues of such an honorary member.

Motion made and carried that this society invite the Northern Tri-State Medical Society to Elkhart on Jan. 12, 1915, and that the annual meeting of the County Association be combined with the semi-annual session of the Northern Tri-State Medical Society on that date.

Motion made and carried that arrangement and reception committee of five be appointed by the chair to work with Dr. Spohn in planning the January meeting and in entertaining the visiting physicians and surgeons.

Program committee reported.

The following clinical case was presented by Dr. E. E. Ash:

Male, aged 61. At the age of 13 the patient was thrown from a horse and suffered internal and external injuries which resulted in a chronic abscess at site of sacrum. About twenty-five years ago a fecal fistula formed, which has persisted. It comes through foramen at second segment of the sacrum. Infection recently has extended down through superficial tissues of the hip. An examination of the patient showed a sinus opening through the sacrum. Other than some degree of malnutrition, the patient showed no other general symptoms.

In his paper under the caption, "Aeroplaning in Medicine," Dr. Frank A. Benham reminded the local profession of instances where the code of ethics had been forgotten or disregarded. He believes that each physician views his fellow practitioners with a degree of suspicion; that the mercenary nature has been developed to an abnormally high degree in some surgeons; that the desire of some men to have their names mentioned in the daily papers amounts to a mania; that publicity or calling attention to these faults is the best mode for their correction.

Adjourned. JAMES A. WORK, JR., Secretary.

Special Meeting, Sept. 17, 1914

Called to order by President Ash at 8 p. m., in the president's office, Goshen, with a very large part of the membership present. Purpose of meeting, instruction of delegate to State Association Convention, September 23 to 25.

After a long discussion in which each member took part, the following resolution was proposed and passed:

Inasmuch as various physicians and surgeons seem to have different opinions on the subject of ethics and the division of fees, therefore be it

"Resolved, That the Elkhart County Medical Association encourage a better understanding and a more equitable adjustment of fees between the family physician and the surgeon; be it further

"Resolved, That we are opposed to secret division of fees."

Adjourned. JAMES A. WORK, JR., Secretary.

FORT WAYNE MEDICAL SOCIETY

Meeting of Jan. 20, 1914

Society met in regular session at Commercial Club with eighteen members present. Meeting called to order by President Dancer. Minutes of previous meeting read and approved.

Clinical cases:

Dr. Rothchild reported the case history of a child six years of age. Sick since yesterday; passed some pin worms; temperature 104 F.; constipated; distinct odor of acetone; no vomiting; anuria for twelve hours.

Dr. Duenling reported the following case:

Mr. H., 28 years of age; married; farmer; family history negative. Previous history.—Had sciatica two years ago; negative. Present history.—Five weeks ago complained of pain in abdominal region. Pain occurring at intervals, lasting four or five hours; nausea and vomiting aggravated the pain; loss of appetite; constipated; noticed some blood in stool, also some mucus; temperature 99 2/5; pulse 106; considerable pyrosis; blood haem. 87, white 7,600; differential count: "Poly" 70, small 23 per cent., eosinophils 7. Urine reaction, acid, specific gravity 1,028, no albumen, no sugar. Stool contains blood. Operation, appendectomy, resection head of colon, ileocecal valve and two inches of small bowel. Lateral anastomosis. Pathologic report: Section of the mass presents a picture of uniform round cells, rather a large nucleus and small amount of connective tissue. These cells are not unlike ordinary lymph cells. There are some connective tissue bands and blood-vessels scattered through section; no signs of malignancy. Section of lymph gland removed at time of operation normal—diagnosis lymphadenoma of head of cecum.

DISCUSSION

Dr. B. Van Sweringen: In the second case it would not be considered a mistake in removing this type of growth, for it is not known if they are benign before operation. I trust that the growth will not recur.

Dr. McCaskey reported another case of cerebrospinal syphilis. Male 35. History of primary sore; for several years has been taking active treatment (intramuscular injections of mercury); has had no treatment for past two years; blood Wassermann negative; spinal Wassermann positive. This simply adds evidence to the often-observed condition where blood will yield a negative Wassermann and spinal-fluid a positive reaction.

M. F. Porter, Jr.: Negative spinal fluid and negative blood does not necessarily mean that the individual has not had syphilis. Negative cerebrospinal fluid and positive blood is a rare condition, but it does occur.

Dr. McCaskey (in closing): I have a case in the hospital now with a destroyed nasal septum with a negative Wassermann in the blood.

Dr. Edlavitch reported the following cases:

First. Male, with a history of injury to the left testicle. Anti-syphilitic treatment was given on the strength of a positive Wassermann without benefit. Testicle removed. Specimen exhibited; microscopic examination shows a mixed-celled sarcoma of the testicle.

Second. Pieces of tissue, sent in from a neighboring town, taken from a uterus. This tissue was made up of giant cells. The uterus was removed. Sarcomatous degeneration of a mucous polypus was present.

Dr. Porter: The macroscopic appearance of malignant growths does not receive the attention that should be given it. The difference on section alone is often so characteristic that a diagnosis can be made.

Dr. Weaver: This case of malignant uterus might be spoken of as a uterine fibroid with secondary degeneration.

Paper of the evening was Carcinoma of the Ovary. (this paper was published in full in the Transactions of the American Association of Gynecologists and Obstetricians) by Dr. M. F. Porter.

DISCUSSION

Dr. Duemling: One is able to make a diagnosis of a solid tumor by bimanual examination in a youthful patient. One can also make a diagnosis of sarcoma in that case. One patient, I remember, was sent to me with a diagnosis of pregnancy. She was only 14 years of age. This case proved to be fibroid of the ovary. Recently I removed such a growth from a woman past 60 years of age. Speaking of the operability of these cases, many cases should receive better attention at our hands. We frequently class cases as inoperable when we might remove the growth, if we attempted it, and thus relieve and cure a lot of these cases.

Dr. Rothchild: I recently saw an article on carcinoma of the ovary as rather frequently complicating cancer of the stomach.

Dr. Edlavitch: The present status of etiology of malignant neoplasms is where it was twenty-five years ago, but there has been some interesting work done in the last few years. Eosin selenium injections form a combination which produces a decomposition of malignant cells. Febiger in his experiments on rats found polyp-like growths in the stomachs of rats, and true metastasis was produced by these growths. He found parasites in these growths and produced malignant growths by feeding these parasites to animals. The greatest hope in the treatment of malignant diseases seems to be with radium. Some of the results with this metal are wonderful.

Dr. Porter (closing): Something like 5 per cent. of all ovarian tumors are malignant. All or nearly all bilateral tumors in children are malignant. I only know that the arsenical salts have a peculiar affinity for malignant cells and produces a degeneration and that the roentgen rays assist this affinity. Howard Kelly is the most enthusiastic man who has done any work with radium. Abbe said that radium would not prove to be anything like a specific for cancer. The most important thing in the whole subject of malignant diseases is in the hands of the family physician or general practitioner. Most cases of cancer fall into the hands of these men early and it is at that time that surgery is most beneficial.

The reports of the secretary and treasurer for the year 1913 were read. Motion carried that these reports be referred to the auditing committee. President appointed Drs. Grandy, Metcalf and Rothchild as auditing committee. Application of Dr. C. C. Singer was favorably acted on by the Board of Censors. Motion made and carried that the secretary cast the unanimous ballot of this society for Dr. Singer for membership. Ballot so cast. Letter from Dr. Lydia A. DeVilbiss presented. Motion carried that the matter of Dr. DeVilbiss' application for membership be referred to Board of Censors.

Adjourned. G. VAN SWERINGEN, Secretary.

Meeting of Jan. 27, 1914

Society met in regular session in the assembly-room of the courthouse with nineteen members present. Minutes of preceding meeting read and approved.

Clinical cases:

Dr. B. Van Sweringen: Female, 39 years; seven months pregnant; one week ago began to vomit and has vomited incessantly since; yesterday became jaundiced; temperature 99 F.; pulse 72. In view of the probability of obtaining a live fetus and emptying the uterus quickly a cesarean section was made, obtaining a live baby. Further report on this case will be made in the future.

Dr. Porter: I wish to present briefly the history of two cases illustrating a point in differential diagnosis. Female; diagnosis, acute appendicitis; 14,000 leukocytes; no fever; no abdominal rigidity; excessive tenderness at McBurney's point; opening abdomen found normal appendix; some bloody fluid in the peritoneal cavity; right ovary contained a cyst, which ruptured.

CASE 2.—Male with pain in right iliac fossa; no rigidity; extreme tenderness; history of previous attack; section showed acute gangrenous appendicitis. I have always laid great stress on the importance of presence of abdominal rigidity in diagnosis of peritonitis.

DISCUSSION

Dr. B. Van Sweringen: Some years ago I reported a case of well-marked appendicitis without rigidity; operation revealed gangrenous appendicitis.

Dr. McCaskey: Apropos of this question of acute infections of the abdomen, I have a patient in the hospital now with a leukocytosis of 26,000, 86 "poly"; patient has a psychosis; negative blood and negative spinal fluid for Wassermann; no somatic sign anywhere; I have always explained these cases of leukocytosis, without cause apparently, to a chemotaxis.

Dr. McEvoy: I sent in a case for operation for appendicitis in a patient who had a mass in the right side, tenderness and rigidity, increase in temperature and pulse; on opening the abdomen found post-peritoneal abscess; drainage was instituted and the patient was a long time in recovering.

Dr. McCaskey reported the following case: Male, age 55; three months ago began to have cervico-occipital pain; pain increased until one week ago, when gait was not thought to be the same; some difficulty in movement of arms; patient was taken with a severe pain in the head and had to be taken home; became semicomatose but could be roused; pupils decidedly small, but responded to light; knee-jerks exaggerated; no Babinski reflex; no clonus; Kernig negative; 15,000 leukocytes; mononuclear count of 10; spinal fluid normal; negative Wassermann, both blood and spinal fluid. Has brightened up a little; slight weak-

ness on right side; temperature normal, but even last few days has risen to 102; blood-pressure 130; urine contain casts; phthalein test 45.

DISCUSSION

Dr. Weaver: One condition which should not be lost sight of and that is angiospasm. I have seen a case of this type through several attacks of the same nature; patient finally had an apoplexy. I think one might be mistaken in taking blood-pressure in these cases as a guide to the degree of arteriosclerosis. We might have a localized arteriosclerosis in the arteries in the brain.

Dr. Weaver reported a case of continued fever for diagnosis.

Case report. Continued fever. By B. P. Weaver: J. H. H., aged 57; laborer; married. Family history unobtainable because of early orphanage. Personal history negative save for fractured ribs two years ago, at which time presence of apparently old endocardial murmur was noted. No cardiac symptoms before, during nor since that time. Seen Jan. 3, 1914, complaining of rather severe chills, followed by profuse sweats and fever for past two days. Slight coryza and some muscular soreness scattered over body, especially over tips of last ribs and at attachment of abdominal muscles to ribs. Some headache but not constant. Appetite not quite up to normal and slightly more easily fatigued for past couple of weeks. No epistaxis, no bronchitis, some backache in lower lumbar area.

Examination.—Rather slender male, somewhat old for his years. Pupils normal to light and accommodation, slight arcus senilis, tongue furrowed and presents rather heavy coating, especially on lateral aspects. Throat, lungs and belly negative, no splenic nor hepatic enlargement. Area of cardiac dullness normal, apex in fifth interspace, $3\frac{1}{2}$ inches to left of mid-sternal line. Systolic murmur over whole cardiac area and transmitted both toward left axillary space and into vessels of neck. Rather marked arrhythmia in early part of illness but which later completely subsided. Systolic blood-pressure (1/24/14) 90, diastolic 55. Slight tenderness to deep pressure over both upper lumbar areas though not constant. Prostate moderately enlarged but not tender. Tendon and cutaneous reflexes normal. Temperature at 4 p. m. 102.2, pulse 95, respiration 22.

Not seen again until the 7th, when history was a continuance of symptoms without much change. Urine—total output 400 c.c., specific gravity 1.022, some albumin, many granular casts. Subsequent examination showed normal output with disappearance of albumin and diminution in number of casts. Blood—hemoglobin 90. White blood-corpuscles 10,200, with normal differential count. Subsequent examination showed total number reduced to 7,000 with normal differential count. No plasmodia. Blood-culture negative twice. Widal negative on the 10th, 14th and 20th. Blood negative to paratyphoid on the 20th.

Subsequent course was that of continued fever of the morning remission type, varying from 97 in morning to maximum of 103.7 in evening, with pulse ranging in frequency from 56 to 95, usually from 58 to 70, despite pyrexia. Although not present every day, drenching sweats, occurring usually in the early morning, have been a feature of the case.

Temperature and pulse having remained normal for previous three days, patient was allowed to be propped up one hour yesterday and, probably as a result of

this, the temperature last night reached 101.3. This morning at 11 o'clock it was 99, pulse 72, and patient expressed himself as feeling hungry and good, save for some exhaustion. At 5 p. m., however, the temperature rose to 103 while the pulse remained at 70.

DISCUSSION

Dr. B. Van Sweringen reported a case in which enlargement of the heart was the only sign of cardiac disease; there were no murmurs; patient subject to febrile action; blood negative to culture a number of times, until finally a pneumococcus was grown.

Dr. Porter: This history sounds like a case of osteomyelitis, if the endocarditis is old.

Dr. Porter, Jr.: I do not think it is wise to forget influenzal infection.

Dr. Edlavitch: I think the suggestion as to influenza is good. I remember a case diagnosed as typhoid, with a negative Widal; finally an osteomyelitis developed in the left arm. We had to have two blood cultures in this case. The first contained a bacillus and the staphylococcus albus which were evidently the result of contamination. Staphylococcus was found in the second.

Dr. McCaskey: These cases belong to the cystogenic infection. Bacteremia may occur without any signs of local infection. I would like to make a protest against the tendency to discredit the presence of staphylococcus albus in the blood as being connected with a case of this type. Adami has demonstrated that there are organisms constantly in the intestinal tract which enter the portal vein and circulate through the liver. Under normal conditions the liver destroys them, but when pathology is present they are found in the endothelium.

Dr. Bruggeman: If a man could get a blood-stream infection through the liver, it must surely be a more frequent condition than we at present find and ought to be an extremely fatal condition.

Dr. Porter, Jr.: I do not know of experimental evidence which can be used to prove my point but I do know of cases given by Keys and others that a colon bacteria infection of the genito-urinary tract can arise through the portal circulation and produce infection; so can any other bacterium.

Dr. Weaver (in closing): This case illustrates the fallacy of the triad of infections producing continued fever. I think the endocardial infection in this case can be ruled out because of the fact that it has been there for a long time and it is in the same condition now as it was then. Osteomyelitis can be ruled out because of the leukocyte count and no bone pain. Cabot says we had better make a diagnosis of unknown origin than to make one of influenza. This patient wants to know what his trouble is. The difficulty in obtaining blood-culture without contamination is in the sterilization of the skin. It is probable that the presence of the staphylococcus albus in this case was a contamination because its presence would be shown by an increased pulse rate and an increased leukocyte count.

Dr. McCaskey reported two cases of meningitis.

CASE 1.—W. H., female, age 5, family and past history unimportant. Present history began with attack of measles on the 29th of March, 1913. Twelve hours later efflorescence was noted. In bed three days, then up for three days when she had a chill and temperature rose to 103, around which mark it hovered until April 11, when she was first seen by Dr. Henderson.

Complained during part of this time of pains in stomach and back, vomited and was delirious. When seen by Dr. Henderson temperature was 103, pulse 108, child was delirious—incontinence of urine and stool. On the 4th of April Dr. Henderson noted the right forearm to be twice as large as normal, very edematous but the skin not red. Temperature continued to reach 103 or 104 degrees daily. The patient came under my observation April 18, 1913. At that time her temperature was 102.6, pulse 148, respirations 38. Both the right and left chests were full of rales, breath sounds harsh, fremitus increased. Heart was negative, except for its rapidity and the abdomen was retracted and moderately soft. At times the child lay in a stupor and at times with head retracted, contralateral signs marked and Kernig triple plus.

Examination of the urine was negative and the blood showed 28,000 whites—differential, polynuclears 82, small lymphocytes 16, large lymphocytes 2. Lumbar puncture yielded one ounce of turbid fluid under increased pressure. Smear showed pus cells, 91 per cent. of which were polynuclear, with occasional diplococci, definitely encapsulated.

Diagnosis of pneumococcus meningitis was made and an autogenous vaccine prepared.

After a week's stay in the hospital on this and general treatment, her temperature dropped from around 105 to an average of 100, and in many ways she seemed improved; was less stuporous and took her food pretty well. On the 7th of May she had a sudden rise in temperature to 102.4, which fell during the day and remained below 99 for three days, when it again rose to 103. At periods of about every three days it continued to rise and with it appeared a more marked rigidity of the muscles of the neck and a tendency to opisthotonus. The child grew progressively weaker and more emaciated, though the chest signs cleared up almost entirely. She left the hospital on the 28th day of May unimproved. Fever with rapid pulse continued, as well as the semiconsciousness and contractures of all extremities developed. Finally entered a state of coma vigil and died on August 21. Autopsy was not obtained.

CASE 2.—Mrs. A. C. H., age 30, was seen in May, 1911; family history negative. Past history negative. Present illness, health always good until present trouble began five years previously, one year after the birth of her last child. First symptom was described as a weakness of the back and limbs with a sort of aching and tired feeling, which gradually increased with a loss of motor power, limited to the lower extremities. Past two years had had to use crutches and for the past two months had been unable to walk even with their help. Complained of painful cramps in the feet at times. The eyes tired easily but vision was good. The history otherwise not remarkable.

Physical examination showed pupils equal, regular and with normal reactions to light and accommodation. Had spontaneous clonic movement of the head and sometimes of the arm. Knee-jerks, triple plus both sides. Ankle clonus triple plus both sides, occurring on any slight stretching of tendo-Achilles, even spontaneous at times. Babinski, plus both sides, great toe rising and remaining for several seconds in tonic contraction. Elbow-jerk, one plus, both sides. Kernig sign positive, no neck or contralateral signs. Marked tenderness on pressure in sixth and seventh dorsal interspinous spaces. Percussion did not cause pain. Blood and urine showed nothing remarkable.

Next seen Oct. 15, 1911. Weakness and helplessness of the legs had increased so that she was bedfast. Vision failing. Impairment of sphincter control; bed sore base of spine. She gradually grew worse, in spite of potassium iodid and mercury treatment until sphincter control was completely lost. On the 30th of October the knee-jerks could not be elicited. On the 2d of November temperature rose suddenly to 103 F. with a chill. On the 3d to 105 F. with another chill. Spinal puncture at this time showed a cloudy purulent foul-smelling fluid under some pressure. Specific gravity 1,040, cell-count 20,200, practically all polynuclear and myriads of small motile organisms. There was no sugar reduction. Cultures of the blood showed the infecting organism to be bacillus coli. Patient grew weaker and passed into coma and died Nov. 4, 1911, at 9 p. m. Autopsy not obtained.

Dr. Porter, Jr.: I think that the infection in this case was due to the bed sore. The spinal fluid came out under pressure and you could smell the odor of colon infection. It looked like thin pus. Pneumococcus meningitis is rare—that is, the primary type. This case (pneumococcus) left the hospital against instruction. I feel from the improvement following the vaccine in the hospital that it could have been made more so had the patient been under our control. I could find in the literature no case which lasted as long as this case. The emaciation in this case was more marked in spite of the fact that she took her food well.

Dr. Edlavitch: Pneumococcus follows operations on the nose and throat. I have seen five cases of pneumococcus meningitis; two of these cases followed operations on the nose.

Dr. Weaver: If there is anything in Billing's and Rosenow's work on pneumococcus, the pneumococcus vaccine alone is not enough, but a mixed vaccine should be used.

Dr. Porter, Jr.: The work of Rosenow, as shown in *The Journal of the American Medical Association*, shows good results with the detoxicated vaccine in pneumonia.

Dr. McCaskey (in closing): It was thought that vaccine therapy should not be used in acute diseases. We are getting good results from the stock vaccines in the Eberth bacillus infections. Sensitized vaccines seem to me to be of more importance than the detoxicated. Mulford & Co. are putting killed sensitized vaccines on the market.

Motion made and carried that it is the sense of the Fort Wayne Medical Society that the action of its secretary is correct in his interpretation of the by-laws relating to that section for the payment of dues—[Section 2]—Chapter 5—Funds and Expenses. The applications of Drs. J. Frank Dinnen and George Bliss read and referred to the Board of Censors. Adjourned.

GARRETTE VAN SWERINGEN, Secretary.

GRANT COUNTY

July

The Grant County Medical Society held its July meeting in Van Buren July 28. The meeting was a joint session with the Huntington County Medical Society. Dinner was served at 6:30 o'clock in the Methodist Church, where seventy people were seated.

The scientific session was called to order by President Kimball in the I. O. O. F. Hall at 8 o'clock.

The opening address was by Rev. J. D. Campbell of Van Buren.

Minutes of June meeting read and approved.

Paper on "The Use of the Pituitary Extract in Obstetrics" was read by Dr. I. E. Perry of North Manchester. Dr. Perry based his paper on personal experience with pituitin covering the past eighteen months, touching especially on the results obtained in twenty-six cases. Paper was well received and generously discussed. In the absence of Dr. Fred W. Grayston, the discussion was opened by Dr. Chafee of Huntington.

President Kimball presented the matter of the publication of the paper entitled "Fees and Fairness" recently read before the Grant County Medical Society and later before the Eleventh District Medical Society by Dr. A. A. Hamilton and commended by both. He urged that same be published by private subscription and that the members present subscribe such amounts as they saw fit for this purpose. The secretary of Grant County Medical Society was later named as custodian of this fund. Dr. C. E. Good, who with Dr. Kimball had been appointed by the president of the Eleventh District Medical Society (they to select the third member) to look after the publication of this paper asked to be relieved of this service. Dr. Claude Black of Warren, was selected to act in his stead.

The society accepted the invitation of Drs. Jeffrey and Stout to hold the August meeting in Upland.

Dr. A. T. Davis moved that the thanks of the Grant and Huntington County Societies be extended Drs. Teney and Richardson, and to the ladies of Van Buren whose deep interest and warm hospitality had contributed so much to the success of the meeting. Carried.

This was the first joint meeting that we have held for some time and it was a great success. There were thirty members of the Grant County Society and ten of the Huntington County Society present at the scientific session.

Adjourned J. E. JOHNSON, Secretary.

September

The September meeting of the Grant County Medical Society was held in Rigdon on the evening of the 22d. Rigdon lies about fourteen miles southwest of Marion. The trip had to be made by automobile, and in spite of a very hard storm which started during the afternoon and continued all evening, twenty-five doctors were in Rigdon at 7:00 p. m., ready to do justice to the big chicken dinner set for them by the ladies of the Methodist church. The members of the society were accompanied in most instances by their wives, and forty-five partook of the greatest dinner which was ever set for this society.

The scientific section was called to order by President Kimball at 8 o'clock. The essayist was Dr. Chas. F. Neu of Indianapolis, who addressed the meeting on "Rational Psycho-Therapeutics." Dr. Neu was warmly welcomed and the practical trend of his paper added very much to its interest. He was tendered a vote of appreciation by the society.

The secretary was instructed to write the secretary of the Wabash County Society and endeavor to arrange a joint session of the two societies for October to be held in Wabash County.

The members of the society present at the meeting were Drs. Kimball, Bechtol, Overman, Jeffrey, Eshel-

man, Braunlin, Maurer, Powell, Ross, Knight, Daniels, McQuown, Richardson, D. A. Holliday, L. D. Holliday, Barnett, Eckhart, Vigus, Hamilton, Cameron and Johnson. Visitors were Dr. Earl Daniels of LaFontaine, Dr. Jones of Fairmount and Drs. Hollis and Corey of Hartford City.

The meetings of the Grant County Medical Society from November to April, inclusive, are held in Marion. Those of the rest of the year, which embrace the pleasant months out of doors, are migratory and are held in the different towns of the county, the members going by automobile. The greatest meetings of all the year are our migratory meetings. The drive across country followed by the "big eats" which precede the meeting have proven with us of wonderful stimulus to the attendance. I wonder if some of the other county societies could not adopt this plan to their advantage?

Adjourned.

J. E. JOHNSON, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1914, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies."

HEPCO FLOUR.—A flour prepared from the Soya bean. It is claimed that clinical trial has shown that the small percentage of carbohydrates in Hepco Flour is in the main not sugar-producing, and that it therefore is a suitable food material in cases in which carbohydrates are contra-indicated, as in diabetes, amyloseous dyspepsia, etc. Hepco Flour is also sold in the form of biscuits as Hepco Dodgers and a granulated "breakfast food" as Hepco Grits. Waukesha Health Products Company, Waukesha, Wis. (Jour. A. M. A., Sept. 26, 1914, p. 1113).

PROPAGANDA FOR REFORM

DIGALEN OMITTED FROM N. N. R.—In view of increased extravagance regarding the claims made for Digalen by the Hoffmann-LaRoche Chemical Works the Council on Pharmacy and Chemistry decided to investigate the present eligibility of Digalen. Examination demonstrated that the asserted presence in Digalen of "amorphous digitoxin" was not substantiated by evidence, that Digalen and Digalen Tablets were not constant in composition and action and that the claim that Digalen causes less gastric disturbances than digitoxin was unfounded. While the manufacturer promised to hold the claim that Digalen contained "amorphous digitoxin" in abeyance, they refused to concede the variable composition of Digalen and reasserted that Digalen was less liable to cause gastric irritation than other digitalis preparations. In view of the overwhelming evidence that Digalen is variable in action and in composition and that it produces the same gastric disturbances as other digitalis preparations, the Council voted that Digalen and Digalen Tablets be omitted from N. N. R. (Jour. A. M. A., Sept. 5, 1914, p. 881).

DOSE OF DIPHTHERIA ANTITOXIN.—While 3,000 units, the dose given in the Pharmacopoeia, probably is a sufficient initial dose in many cases, this quantity is not enough to satisfy the factor of safety. There is a growing opinion that no case of diphtheria should receive less than 10,000 units as the initial dose (Jour. A. M. A., Sept. 5, 1914, p. 873).

VACCINATION AGAINST SMALL-POX AND TYPHOID.—In view of the war, a general revaccination of the population of Paris has been ordered and huge quantities of antityphoid serum have been prepared (Jour. A. M. A., Sept. 5, 1914, p. 873).

ANGIER'S EMULSION.—A report of the Council on Pharmacy and Chemistry points out that when Angier's Emulsion, Angier Chemical Co., Boston, Mass., was first put on the market it was advertised as a "food-medicine" and an "Ideal Substitute for Cod Liver Oil." Although the manufacturers now advertise this product as a laxative and state it to be "purely mechanical in its action" they still mingle with the new ones the old claims of "tonic and reconstructive merits" and thus attempt to perpetuate the erroneous belief that the preparation has nutritive value. As to the identity of the petroleum product contained in the preparation, regarding which the advertising circulars make contradictory statements, the American Medical Association Chemical Laboratory reports that this has all the properties of soft yellow petrolatum (Jour. A. M. A., Sept. 12, 1914, p. 962).

ANGIER'S THROAT TABLETS.—These tablets are stated to be composed essentially of elm bark and petroleum and yet are claimed to "promote appetite and aid digestion." The American Medical Association Chemical Laboratory reports the tablets to contain about 12 per cent. of soft yellow petrolatum, like that found in Angier's Emulsion (Jour. A. M. A., Sept. 12, 1914, p. 964).

ANTISEPTIC ACTION OF HEXAMETHYLENAMIN.—The former opinion that hexamethylenamin possesses antiseptic action independently of the liberation of formaldehyd, was an assumption not founded on reliable experimental evidence. The recent investigations of Burnam, Hanzlik and others have shown that its action as an antiseptic depends on the decomposition into formaldehyd and ammonia which occurs only in an acid medium (Jour. A. M. A., Sept. 12, 1914, p. 962).

VACCINE VIRUS NOT CONTAMINATED.—A study of cases shows that vaccinal tetanus is not due to contaminated vaccine virus. Further, since the law regulating the sale of biologic products in 1902 went into effect, there have been examined in the Hygienic Laboratory of the U. S. Public Health Service over 1,500,000 doses of vaccine virus without a single specimen having been found to contain tetanus spores. Also, experiments indicate that tetanus will not be produced even if the virus used contains tetanus spores. Most cases of vaccinal tetanus are due to infection after vaccination (Jour. A. M. A., Sept. 19, 1914, p. 1032).

SODIUM VERSUS POTASSIUM SALTS.—The probable shortage of potassium salts due to the war suggests that sodium salts may in most cases be substituted without disadvantage. In general potassium salts have no marked superiority over the corresponding sodium salts. While the potassium compounds are said to be more active and to possess a more diuretic effect, the sodium salts are less depressing to the heart and in some instances less disagreeable to the taste. Sodium iodid, sodium bromid, sodium acetate, sodium citrate, etc., are just as effective as the corresponding potassium salts (Jour. A. M. A., Sept. 19, 1914, p. 1034).

SANATOGEN.—Testimonials for Sanatogen are published which show good results in cerebral concussion, alcoholic gastritis, anemia, etc. The patient is given a chance to recover by rest, a proper diet and Sanatogen—and the recovery is attributed to Sanatogen. Based on some biologic experiments the exploiters of Sanatogen assert that "Sanatogen acts as a strong stimulus as far as the recuperative powers

of the blood are concerned." These experiments were repeated by Prof. A. J. Carlson of the University of Chicago, using Sanatogen, casein, casein and glycerophosphates, milk, and crackers and milk. Professor Carlson's experiments show that the effects produced by Sanatogen are not different from those obtained when casein, casein and glycerophosphates, milk, and crackers and milk are used (Jour. A. M. A., Sept. 26, 1914, p. 1127).

VALUE OF TALCUM POWDERS.—The action of talcum powders on the skin depends on their protective and dehydrating properties. On the other hand they tend to form crusts and pastes, due to mixture of the powder with sweat or other secretions. There is doubt if the boric acid in talcum powders can exert any antiseptic action. The action of the salicylated talcum powder of the National Formulary, though containing 10 per cent. of boric acid, depends on its salicylic acid. Commercial talcum powders contain small amounts of various antiseptics and perfuming agents and have little value from a therapeutic point of view (Jour. A. M. A., Sept. 26, 1914, p. 1129).

LIQUID SOAP.—The following economical formula has been proposed. It may be flavored and colored to suit: Sodium hydroxid 55 gm., potassium hydroxid 65 gm., cottonseed oil 800 c.c., alcohol 500 c.c. and water to make 5,000 c.c. (Jour. A. M. A., Sept. 26, 1914, p. 1129).

SIGNIFICANCE OF THE WORD "LUTEIN."—The word "Lutein" has long been applied in physiologic chemistry to designate a group of fat-coloring matters which occur in nature and which have more recently also been given the general designation of lipochromes. As a rule the use of the term has been restricted to the yellow coloring-matter which develops in the ovarian structures. It is unfortunate that lately various preparations of desiccated corpora lutea from animals are being sold as lutein (Jour. A. M. A., Sept. 26, 1914, p. 1119).

BOOK REVIEWS

DIAGNOSTIC METHODS. A guide for history-taking, making of routine physical examinations and the usual laboratory tests necessary for students in clinical pathology, hospital interns and practicing physicians. By Herbert Thomas Brooks, A.B., M.D., Professor of Pathology, University of Tennessee, College of Medicine, Memphis, Tennessee. Second Edition. Revised and Rewritten. St. Louis: C. V. Mosby Company, 1914. Price, \$1.00.

The author of this excellent little book is to be complimented on getting so much useful and practical information in such a small space. The part dealing with the laboratory tests is especially good because only those tests are given which are in general use, and the description is clear and concise. With the exception of the Wassermann reaction and the complement-fixation test for gonorrhea the practicing physician can and should make every one of the tests himself. The reviewer can highly recommend the book.

PRACTICE OF PEDIATRICS. By Charles Gilmore Kerley, M.D., Professor of Diseases of Children, New York Polyclinic Medical School and Hospital. Octavo of 878 pages, 140 illustrations. Cloth, \$6.00. Half Morocco, \$7.50 net. W. B. Saunders and Company, publishers, Philadelphia and London, 1914.

The author does not need any introduction to the medical profession. This new work is of the same

high order as is the volume "Treatment of Diseases of Children" by the same author. The beauty of the work is to be found in the clearness and conciseness of the description, and the elimination of much of the burdensome and superfluous matter so common in many other works on diseases of children.

While the discussion of diseases is brief, none of the essential points necessary to a clear understanding of each condition discussed is lacking. The work is done in the usual Saunders style of excellency in book-making, and withal the work is a valuable addition to the pediatric literature.

BLOOD PRESSURE: ITS CLINICAL APPLICATIONS. By George W. Norris, A.B., M.D., Assistant Professor of Medicine in the University of Pennsylvania; Visiting Physician to the Pennsylvania Hospital; Assistant Visiting Physician to the University Hospital; Fellow of the College of Physicians of Philadelphia. Octavo, 372 pages, with 98 engravings and 1 colored plate. Cloth, \$3.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1914.

Blood pressure literature is rather voluminous, and some of it not very trustworthy. The medical profession will therefore appreciate this authoritative book by Dr. Norris in which our present knowledge concerning blood-pressure and its clinical applications is presented in a condensed and practical form. Both the experimental and clinical data have been utilized, and altogether the book forms a very complete exposition on this now very important subject.

RADIUM AND RADIOTHERAPY. RADIUM, THORIUM AND OTHER RADIO-ACTIVE ELEMENTS IN MEDICINE AND SURGERY. By William S. Newcomet, M.D., Professor of Roentgenology and Radiology, Temple University, Medical Department; Physician to the American Oncologic Hospital; Fellow of the College of Physicians, Philadelphia. 12mo, 315 pages, with 71 illustrations and 1 plate. Cloth, \$1.25 net. Lea & Febiger, publishers, Philadelphia and New York, 1914.

Commencing with the history of the development of radio-activity and following with a discussion of the chemistry and physics of radio-active elements, the author then takes up the physiological action and therapeutic application of the various rays. The various diseases in which radiotherapy has been used are treated separately and the known results given.

The several methods of employing radiotherapy are described and the special indications for each given. The last chapter is devoted to a consideration of the Treatment of Untoward Effects of Radio-Active Elements.

The book is extremely interesting and very timely. All in all, it may be said to be a concise exposition of the subject and as complete as the present state of knowledge permits.

LOCAL ANESTHESIA: ITS SCIENTIFIC BASIS AND PRACTICAL USE. By Prof. Dr. Heinrich Braun, Obermedizinalrat and Director of the Kgl. Hospital at Zwickau, Germany. Translated and edited by Percy Shields, M.D., A.C.S., Cincinnati, Ohio, from the third revised German edition. Octavo, 399 pages, with 215 illustrations in black and colors. Cloth, \$4.25, net. Lea & Febiger, Publishers, Philadelphia and New York, 1914.

This is a practical book by an authority on local anesthesia. Heretofore text-books have given but

little attention to the subject of local anesthesia and the profession as a whole has been forced to rely on information obtained from a variety of sources, many of which were untrustworthy. It is therefore refreshing to have a work that is based on scientific facts and which offers an exact and undeviating technic.

The author describes his methods and cites many operations that have been performed under local anesthesia with complete description of the methods employed. Every step in the technic of local anesthesia work is fully described, and an abundance of operations, many of which are illustrated, present the entire subject in such a manner as to make it of practical use to every physician. In fact, the work covers the whole subject completely and is one of the most valuable additions to scientific medicine that has been given the profession within recent years.

THE EYE, EAR, NOSE AND THROAT YEAR BOOK FOR 1914. One of the Practical Medicine Series. The Year Book Publishers, 327 South LaSalle Street, Chicago. 366 pages. In cloth; price, \$1.25.

This is a review of the more important literature of the year on the eye, ear, nose and throat. The department devoted to the eye is in charge of Dr. Casey A. Wood; to the ear, Dr. Albert H. Andrews; nose and throat, Dr. Wm. L. Ballenger. The fact that the work is in charge of these three well-known men is evidence that it has been done well. It is manifestly impossible in a book of this size to cover all of the literature on the various subjects considered, though all of the more important literature, and in particular that which deals with distinct advances in the theory or practice of the specialties represented, are given appropriate review. As in preceding volumes, the authors have appended their own comments in various instances. Those who practice the specialties are, through force of necessity, compelled to rely on one or more of these reviews of current literature in order to keep fully abreast of the times, and we heartily recommend the Year Book Series as indispensable to those who wish to have a digest of medical progress and reference to the more comprehensive articles which may be of special interest.

A TREATISE ON DISEASES OF THE NOSE, THROAT AND EAR. By William Lincoln Ballenger, M.D., Professor of Laryngology, Rhinology and Otology in the College of Physicians and Surgeons, Chicago. New (4th) edition, thoroughly revised. Octavo, 1080 pages, with 536 engravings, mostly original, and 33 plates. Cloth, \$5.50 net. Lea & Febiger, Philadelphia and New York, 1914.

Dr. Ballenger is to be congratulated on having written a work that is so popular with the medical profession that four large editions have been demanded within six years; and yet, when the work is carefully inspected and analyzed, the reason for this demand is easily discovered, for there is no work in the English language that is more comprehensive or that has been prepared with more conscientious effort. The new edition represents the latest thought on the subjects considered. Practically every line of the former edition has been rewritten and revised to conform to present-day knowledge. All obsolete matter has been eliminated and much new matter has been incorporated, with many new original illustrations and plates. Among new subjects that have been considered may be

mentioned the full description of Mosher's frontal ethmoid operation, with five drawings showing each step. New matter on the labyrinth amounts to over 100 pages, and this is one of the distinguishing features of the new edition. The chapters on vaccine therapy, meningitis, abscess of the brain, treatment of syphilis, otosclerosis and functional tests of hearing have been entirely rewritten and new material added. In fact, nothing seems to have been omitted which is necessary to bring the work thoroughly up to date and in keeping with the very latest thought on the subjects considered. The illustrations, most of which are original with the author, are excellent, and the publisher's work has been done remarkably well. Scarcely too much praise can be accorded this well-known work, and it will continue to merit the approval of students, practitioners and specialists.

HISTORY OF MEDICINE, WITH MEDICAL CHRONOLOGY, BIBLIOGRAPHIC DATA AND TEST QUESTIONS. By Fielding H. Garrison, A.B., M.D., Principal Assistant Librarian, Surgeon General's Office, Washington, D.C.; Editor of the "Index Medicus." Octavo of 763 pages, many portraits. W. B. Saunders Company, Philadelphia and London, 1913. Cloth, \$6.00 net; Half Morocco, \$7.50 net.

There is probably no form of medical literature quite so fascinating from the reader's point of view as a well-written history of medicine, and this, Dr. Garrison's work, is no exception to the rule. No doubt the author's experience as editor of the *Index Medicus* has given him an unusually wide familiarity with medical literature, especially of modern times.

The work opens with a short chapter on the similarity of the different forms of primitive medicine and then takes up the various ancient forms, beginning with the Egyptian and running chronologically down through the Sumerian, Greek, Byzantine, Mohammedan and Jewish periods up to the medieval times, that is, about the eleventh century. Then follows the period of the Renaissance, from the early part of the fifteenth century to the seventeenth, to be followed by a much more exact and complete resumé of the achievements of the last three centuries, times so full of interesting and important medical discoveries that are closely interwoven with our modern practice. The last one hundred pages or so are taken up with appendices and the indexes. For a single volume treatise of the subject of medical history, this work is certainly very full and complete, considering the fact that the author has aimed at both brevity and conciseness in his effort to cover the wide chronology embraced in a work of this scope. It certainly forms a very practical volume for the medical student and affords interesting reading for anyone interested in medical history.

COLLECTED PAPERS BY THE STAFF OF ST. MARY'S HOSPITAL (MAYO CLINIC) FOR 1913. Octavo of 819 pages, 335 illustrations, Philadelphia and London. W. B. Saunders Company, 1914. Cloth, \$5.50 net.

This volume contains papers covering a very wide surgical field, including a good deal of experimental work. The subject of goiter comes in for the lion's share of space—122 pages being allotted to it. Worthy of particular mention in this group of papers is that by Charles H. Mayo entitled "A Summing Up of the Goiter Question." From the point of view of surgical skill, judgment and experience, no one to-day is better entitled to speak with authority on this subject

than is the writer of this paper, and in it is given the gist of the goiter question in his particularly pithy style. There are no fewer than five valuable papers on technic, some of which technic is new and original.

Of especial value also to the practical surgeon are those papers grouped under the head of General Papers, among which we would mention particularly the following: "Care of Surgical Patients," "Complications Following Surgical Operations" (based on a series of 6,825 operations), and "Notes from Some of the Surgical Clinics in Germany, Belgium and Great Britain—1913."

This last paper is by W. J. Mayo, and could be written by none other than a master surgeon, with correct appreciation of surgical values and the faculty of terse expression.

"The Intercarotid Paraganglion and Its Tumors," by Donald C. Balfour and Franz Wildner comprehensively covers the subject of the anatomy, physiology, pathology and surgery of this gland, and has appended an extended, if not complete, reference list.

Space will not permit individual mention of even the majority of the papers in this volume, and besides many of them are familiar to most of the readers of this review. However, we desire to name the following rather rare surgical topics discussed: "Post-Operative Hysterical Hiccup, Gordon B. New; "Mikulicz' Disease," Carl Fisher; "Luetic Mediastinitis: A Consideration of Five Cases," H. Z. Giffin.

The volume is well indexed, the illustrations are first-class and the publisher's work is well done.

DISEASES OF THE RECTUM AND COLON AND THEIR SURGICAL TREATMENT. By Jerome M. Lynch, M.D., Professor of Rectal and Intestinal Surgery, New York Polyclinic; Attending Surgeon, Cornell Dispensary; Fellow of the American Proctologic Society, New York Gastro-Enterological Society, etc. Octavo, 583 pages, with 228 engravings and 9 colored plates. Cloth, \$5.00 net. Lea & Febiger, Publishers, Philadelphia and New York, 1914.

The book is dedicated to Dr. J. P. Tuttle in recognition of his work in proctology and because of gratitude of the author for personal help.

From the preface we learn that the work is intended more particularly for the general practitioner than for the specialist.

The chapter on Diverticula is written by Maxwell Telling of Leeds, Eng., that on Vaccines by Reese Satterlee of New York and that on Roentgen Rays by A. Judson Quimby, while that on Cancer is revised by Ralph W. Jackson of Fall River, Mass. The first three chapters treat of Examination and Diagnosis, Preparation of the Patient, and Anesthesia, respectively, and the fourth considers the Embryology and Malformation of the Rectum and Colon, including the treatment of malformations, while in the succeeding twenty-six chapters the various diseases, injuries and operations are discussed in a systematic manner. The next chapter is devoted to Scrums and Vaccines, and the last (there are thirty-two in all) to Roentgen-ray Examination of the Intestine.

The book bears every evidence of being carefully done by one thoroughly competent. More complete and explicit references would add much to the value of the work. The author advises the injection treatment of piles in a certain few cases. Personally we feel that this operation should be condemned as being uncertain, unsafe and tedious, and having no advantages over other

methods that warrant its adoption in any case. We can't agree with the author when he says that the use of a tube after the clamp and cautery operation for hemorrhoids "saves the patient a great deal of subsequent pain."

As indicated above, the book as a whole is exceptionally meritorious but we would like to commend especially the chapter on Diverticula and Diverticulitis and that on Constipation.

The publishers' work is entirely satisfactory.

DISEASES OF BONES AND JOINTS. By Leonard W. Ely, M.D., Associate Professor of Surgery, Leland Stanford Junior University, San Francisco, Cal. Sextodecimo: 220 pages, 94 illustrations. Surgery Publishing Co., New York. Price, cloth, \$2.00.

The author of this book says in the preface that what is required of a man is "that he shall say what he elects to say discreetly, that he shall be quick to see the gist of the matter, and give it pithily without either prolixity or stint of words." This is a high standard for a writer to set for himself but this writer has achieved it.

The result is that there is much more in the book than the number of pages would indicate.

The author holds that the marrow is the essential factor in all bone diseases; that the inner layer of the periosteum bears a strong analogy to the marrow and has similar functions; and that the synovial membrane is a continuation of the inner layer of the periosteum.

We cannot entirely agree with the dictum that in a compound dislocation the safest course is to regard infection as inevitable and do an immediate resection. Lymphoid tissue in the neighborhood of joints is the prime cause for the location of tuberculosis here, and at no time, provided secondary infection does not take place, is any other tissue involved. If we can cause the disappearance of the two lymphoid tissues (marrow and inner periosteal layer with its continuation—the synovia), we cure the tuberculosis, we shall probably have to reverse our ideas on the theory of phagocytosis. All cases of arthritis are probably infectious. "Faulty metabolism" as a cause of joint disease is a cloak for ignorance.

"The curet has little place in bone surgery. Bone scraping is at best a poor operation."

LeConte's contention "that if operation is done for suppurative osteomyelitis within ninety-six hours of the onset, it should be possible to remove all the dead bone and obviate the necessity of later operation, is regarded as logical."

We desire to note our entire agreement with the author when he says that "the only specific effect of iodoform is probably a bad smell, or in rare cases severe symptoms of poisoning."

The book is well gotten up. There are very few typographical errors. Numerous references are given to the literature. Marginal notes in red make reference to any particular subject easy. Some of these marginal notes are misplaced and this should be corrected in the next edition—which we predict will soon be called for.

INFANT FEEDING. By Clifford G. Grulee, A. M., M.D., Assistant Professor of Pediatrics at Rush Medical College, Chief of Pediatric Staff, Cook County Hospital. Second Edition, Thoroughly Revised. Octavo of 314 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$3.00 net.

The whole subject of pediatrics viewed from a scientific point of view is of comparatively recent

development and that of infant feeding may be said to have been put on a practical as well as scientifically correct basis only within the past five years. The fundamental principles, of course, have been understood for a somewhat longer time, but the methods of arriving at the best results have varied widely and have given rise to various "schools" of infant feeding.

In this book the author, who is one of the foremost authorities on the subject in this country, has emphasized the importance of the end-results in artificial feeding rather than the means in obtaining them. He condemns the percentage method as too mathematically exact and too difficult of application for the average general practitioner. He further says that it has been largely responsible for the fallacious idea that protein is the chief source of gastro-intestinal disturbances in infancy. Of the caloric system he says that "though the standard is not without exception even in the normal infant . . . it furnishes a principle in the nutrition of the normal infant." In the average normal case, the author's method is as follows: First, estimate the capacity of the infant's stomach, according to its age. Multiply this figure by the number of feedings to be given in a day, i. e., five or six, since the author is an ardent advocate of the four-hour interval. This is the total number of ounces of food given in a day and is made up of milk, 1½ oz. to the pound weight, remainder of water, and malted food added (usually about an ounce). Obviously this is only a general working basis and to escape the criticism the author makes the percentage method, must be subject to frequent modification, according to the needs of the individual infant under consideration.

The book is full of sentences of the most vital importance to anyone who attempts to direct the feeding of infants, only a few of which can be mentioned here.

"To regard a gain in weight as the only sign of progress is to-day the most vital error that is made."

(In breast feeding): "Changes of diet in the mother are of value only in so much as they affect her general bodily health."

"After the ninth month, the baby thrives better if artificially fed."

"Obesity of the baby is as much a pathological condition as that of the adult . . . the baby who is extremely fat after the first year suffers from attacks of gastro-intestinal disturbances during the second."

In considering the nutritional disturbances of breast-fed and artificially-fed infants, the author follows the simple Finkelstein classification: (1) weight disturbance, (2) dyspepsia, (3) decomposition, (4) intoxication. This classification permits of a more intelligent application of the fundamental principles of infant-feeding in the various nutritional disturbances with better results than any other suggested to date.

The work is a very complete one, containing practically all of the clinical and experimental facts concerning the anatomy, physiology, chemistry and pathology of the infant digestive system that have been brought out in recent years.

In addition to the discussion of feeding in health and in nutritional disturbances, the author has added a valuable chapter on feeding in the various diseases of infancy.

In simplicity, celerity, forcefulness and practicability, this book should stand at the head of the authorities on infant feeding in this country.

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ORIGINAL ARTICLES

GOITER: DIFFERENTIAL DIAGNOSIS *

RICHARD B. WETHERILL, M.D.
LAFAYETTE

With our limited knowledge of the physiology, chemistry and pathology of the thyroid gland, it is impossible at the present time to make a satisfactory classification of its diseases. The problem would be sufficiently complicated if it were confined to the thyroid gland alone, but it has become more difficult by reason of our lack of knowledge of functional relationship existing between the thyroid and the other ductless glands. These glands frequently have been observed to undergo pathologic changes in marked thyrotoxicosis, but whether the changes are to be considered as etiologic factors in the diseased thyroid, or are secondary results similar to the degenerations in the kidneys, heart, liver and nervous system, are questions to be answered by future investigation. That all the ductless glands are intimately correlated is generally accepted, but we are ignorant of the exact part each one plays in different physiologic processes. Thus the thyroid and hypophysis are closely connected in function, as they are in their histology and pathology. So great is the resemblance that Shattock has described a condition of the latter to which he has applied the term pituitary goiter. Recent research has shown that the thyroid, associated with the parathyroid, controls calcium metabolism; with the adrenals and hypophysis it regulates blood-pressure; and, again, with the latter it stimulates the natural growth and development of the body.

The thyroid is formed embryologically by a protrusion of the mucous membrane of the

pharynx at the base of the tongue, and was originally connected with the pharynx by the thyroglossal duct, which becomes obliterated about the seventh week of fetal life. The position would indicate a digestive function, but there is every evidence to show that it is a sex gland, as a disturbance of its function often occurs at puberty, during pregnancy and menstruation, at the menopause and during sexual excitement; indeed, it has been discovered that in certain lower forms of animal life this duct empties into the uterine cavity.

Histologically, the thyroid has an alveolar arrangement of stroma, each alveolus lined with cuboidal epithelial cells, leaving in the center a small space filled with a deep-staining material called colloid.

The secretion of the gland finds its way into the lymphatics of the stroma, and eventually reaches the venous circulation by the thoracic duct.

The gland shows a strong affinity for iodine, which is stored up in its secretion in the form of iodothyroglobulin. The iodine content varies in health and disease; thus in hyperthyroidism and simple goiter the iodine content is greatly below that of the normal gland, and in the former iodine can be demonstrated in the blood.

The term goiter is applied to every enlargement of the thyroid gland not resulting from infection or malignancy. It appears in a number of forms, each of which rests on a different pathologic basis. To that form associated with marked constitutional disturbances the names exophthalmic goiter, Graves' disease, hyperthyroidism, toxic goiter and thyrotoxicosis have been applied by different writers. The term simple goiter is usually given to those forms in which the enlargement is not accompanied by toxic symptoms.

For our present purpose, it will be advisable to first study the characteristic pathologic findings in different types of goiter, and then making

* One of the papers comprising a symposium on goiter presented before the Indiana State Medical Association at Lafayette, Sept. 23, 1914.

a clinical classification, endeavor to reconcile the clinical findings with the morbid anatomy.

Those enlargements that affect the entire gland equally are called diffuse goiter, and those localized to only a part of the gland are termed nodular goiters, and in each of these divisions several types can be recognized according to the particular glandular element involved. Thus we have:

First, hypertrophic follicular goiter, a true hypertrophy of all the gland elements, epithelium, stroma and colloid. This is the physiologic goiter of puberty, or it may be the first stage of the following types.

Second, parenchymatous, a form consisting of hypertrophy and hyperplasia of the epithelial cells lining the acini. The colloid material is diminished in quantity and is more fluid. These same changes are found in exophthalmic goiter, but are more pronounced. The epithelial cells are greatly elongated and numerically increased, crowding the epithelial lining of the acini into projecting folds and encroaching on the central lumen.

Third, colloid goiter. The acini are greatly distended with colloid material. The epithelium is lower and shows the result of pressure, and the blood-vessels contain less blood than normal. Frequently the walls of adjoining acini break, and large accumulations of colloid occur by their coalescence.

Fourth, adenoma, the struma adenomatosa recursens of the Germans, characterized by an increase in the glandular elements by the formation of new follicles of small size, presenting the appearance of a true adenoma, but without a capsule.

Any of the above, except the first division, may be localized to one or more portions of the gland when it is called nodular goiter. The adenoma may form a true tumor of the gland, in which case it exists in a fetal and adult type and is encapsulated.

The proliferation of the glandular elements of nodular goiter are irregular and unequal. Clinically, all goiters fall naturally into two classes: first, toxic, associated with certain characteristic constitutional disturbances; and second, simple goiter, in which the disease is confined to the gland, and if general symptoms do exist are caused only by pressure on important neighboring structures by the enlarged thyroid.

This classification would be satisfactory were it not for the fact that in a certain number of cases of toxic goiter the evidence of toxemia is delayed, and in those abortive cases where the

characteristic symptom-complex is not clearly defined; also in those cases of simple goiter in which the enlargement is not accompanied by toxic symptoms until the goiter has existed a number of years. The statistics of Plummer, of the Mayo clinic, show that 23.5 per cent. of non-hyperplastic goiters are toxic, the goiter making its appearance at the average age of 22.3 years, and the evidence of intoxication at the average age of 36.5 years, the average age of exophthalmic goiter being 32 and 32.9 years. In both these conditions we find a difference in the onset, pathologic findings and in the symptomatology.

Mayo believes that future investigation will differentiate these two distinct types, but at the present time there is insufficient data for classification.

We have seen that exophthalmic goiter is caused by a hyperplasia and hypertrophy of the secreting cells of the gland, followed in about six months with evidence of intoxication caused by excessive absorption of thyroid secretion. After a time these secreting cells return to their normal size or atrophy, when the toxic symptoms gradually disappear. Sometimes after a period of quiescence the gland resumes its over-activity and another attack ensues. In simple goiter of the colloid, hypertrophic or adult adenoma type, we do not as a rule have toxic symptoms, and in colloid there is an actual impairment of the secreting epithelium. The secreting cells of these simple goiters may, after a period of many years, begin to enlarge and multiply, and toxic symptoms resembling Graves' disease supervene, or they may atrophy and degenerate to the extent that the thyroid is unable to furnish the required amount of thyroid secretion and symptoms of hypothyroidism appear. Thus we find that every exophthalmic goiter has a tendency to become a simple goiter, and 26 per cent. of simple goiters will, after a time, become toxic.

Dividing goiters on this basis we have toxic goiters including: first, true types of exophthalmic goiters; second, simple goiters with late development of toxic symptoms; third, goiters with symptoms of loss of function.

The non-toxic class includes: first, simple hypertrophy; second, colloid; third, cystic; fourth, fibrous, and fifth, encapsulated adenoma.

In the first division it will be necessary to differentiate between the symptoms of excess and impairment of the thyroid function. The former will be found in the symptomatology of typical cases of exophthalmic goiter.

DIFFERENTIAL DIAGNOSIS

| HYPERTHYROIDISM | HYPOTHYROIDISM (Simple Toxic Goiter) |
|--|---|
| Age | Age |
| Thirty to thirty-six. | Twenty-two to fifty. |
| Onset | Onset |
| Gradual or acute. | Gradual development. |
| Skin | Skin |
| Profuse perspiration. Dermography. Pigmentation. Falling of hair. | Dry skin. Does not perspire on exertion. Hair dry and brittle. |
| Nerves | Nerves |
| Fine tremor of the hands. Patient active mentally. Restless physically. Great muscular weakness. | Some tremor but not so marked. Muscular weakness. Patient dull and apathetic. |
| Heart | Heart |
| Tachycardia, pulse 120 to 150, increased on slight exertion. Cardiac and vascular murmurs due to increased velocity of the blood. Systolic murmurs at apex and base of heart. Dilatation of heart. Blood-pressure low. | Pulse about 90 to 100, sometimes irregular. Blood-pressure above normal. |
| Exophthalmos | Exophthalmos |
| Common symptom but may be absent. Graefe sign, Dalrymple sign. Stellwag sign. | Generally absent, but may have been present in early stage of disease. |
| Thyroid Gland | Thyroid Gland |
| Symmetrically enlarged. Blowing sound over vessels. Consistency soft but harder than normal on deep palpation. Sometimes goiter very large. Extensive palpation. | Goiter of moderate size. Goiter feels like rubber on palpation. May be cystic or nodular. |
| Temperature | Temperature |
| Slight elevation of temperature, but may reach 104. | Below normal. |
| Urine | Urine |
| Albumin or sugar may be found. | Albumin sometimes present. |
| Blood | Blood |
| Leucopenia. Polymorphonuclear neutrophils, diminished sometimes one-half below percent. of lymphocytes. Marked lymphocytosis. Hemoglobin normal. | Hemoglobin low. Blood normal. |
| Menses | Menses |
| Irregular. Suppressed. | Regular. |
| Pathology | Pathology |
| Hypertrophy and hyperplasia of parenchyma. Brown atrophy of heart muscle. Fatty kidneys. Chronic nephritis. Dilatation of heart. | Atrophy of parenchyma due to pressure of tumor. Degeneration and destruction of glandular epithelium. |

The value of blood findings in exophthalmic goiter is questioned by many surgeons. Theodore Kocher believes that a peculiar blood picture is always found in hyperthyroidism, even in abortive cases. Charles Mayo says the peculiar blood-count is not always present, but when found is conclusive. Some observers claim to have observed this increase in the lymphocytes and decrease in the polymorphonuclear neutrophils in cases of simple goiter. This, in my opinion, should not detract from the value of the

test, as it might imply that these cases of simple goiter were becoming toxic and should be relegated to the class of Graves' disease.

The variable blood-pressure found in simple goiter can be accounted for as follows: The normal blood-pressure is preserved because the system has compensated in some way for a moderate hyperactivity of the gland. This is seen in most cases of hypertrophic goiter, while the high blood-pressure found in cases of ancient goiter may be caused by arteriosclerosis, with which it is often associated. A low blood-pressure is the rule in Graves' disease, but some hypertension is occasionally found in mild cases in an early stage of the disease. The increase of peripheral resistance is caused by a temporary vasomotor stimulation, which is soon followed by vasomotor paralysis with fall of blood-pressure.

An interesting series of experiments conducted by Blackford demonstrates the action of over-secretion of the thyroid on blood-pressure. Blood was taken from a typical case of acute Graves' disease, and the serum injected in the venous circulation of a dog. There followed in a few minutes a fall in blood-pressure of about 30 mm., this effect being similar to that produced by the injection of an extract from the gland itself.

The presence of glycosuria may be intermittent or permanent. In the former case the symptom does not add materially to the gravity of the case, but in the latter it has an important significance as to the advisability of a surgical operation. The cause of the glycosuria is not well understood, but as it is well known that hyperthyroidism affects the metabolism of the body, it is to be inferred that the presence of sugar in the urine is but a part of the disturbance of the metabolism of carbohydrates of the food.

The presence of albumin in the urine is a sign of those degenerative changes found in the heart, liver, nervous system and kidneys, and is an evidence that secondary and permanent structural changes have taken place.

Owing to the peculiar anatomic relations of the thyroid gland, enlargement of the organ will press forward between the sternocleidomastoid muscles, pushing the large vessels of the neck outward and backward, whereas if the gland is simply rendered more prominent by an abscess arising from the cervical vertebra these vessels will be pushed in front of the gland. If the goiter is localized to the processus pyramidalis a small symmetrical swelling about the size of an egg will be found in the middle line of the neck below the larynx. It must not be forgot-

ten that aberrant thyroids may cause enlargements high up and laterally on the neck and at the base of the tongue.

The shape and consistency of the gland will in the majority of cases determine the kind of goiter. Thus in the hypertrophic and hyperplastic varieties the gland is enlarged, but its normal shape is preserved. In colloid, cystic and adenoma and malignant goiters the shape is often irregular and the gland may be markedly pendulous. Cystic goiter is seen at times as a localized, spherical, fluctuating tumor, which transmits light similar to a hydrocele. One very characteristic symptom of all enlargements of the thyroid is that the gland rises in the neck on swallowing and protrudes on coughing. Malignant growths occur, as carcinoma or sarcoma, and are to be differentiated from goiter by the fact that the gland is tender on pressure and on swallowing; the tumor is of irregular contour and there will be swelling of the lymphatics of the neck. It is of the greatest importance that the cause of dyspnea in goiter be thoroughly understood.

In toxic goiter there will be shortness of breath on slight exertion, due to an overacting and dilated heart, the result of toxemia. In simple goiter this dyspnea will be caused by an encroachment on the trachea by pressure or from interference with the pneumogastric nerve, or an impaired circulation of blood in the large vessels of the neck.

Stenosis of the trachea can be detected by auscultation, showing feeble tracheal breathing below point of obstruction. The dyspnea of intrathoracic goiter will often be made worse by raising the arm high above the head and, as a further evidence of the condition, an area of dulness will be demonstrated below the upper border of the sternum and clavicle, and the Roentgen ray will show a shadow at this point.

The symptoms of substernal goiter must be carefully distinguished from those of hyperplasia of the thymus, with which condition it is frequently associated. Its recognition is the more important in consideration of the fact that enlarged and hyperplastic thymus is sometimes a contra-indication to goiter operation on account of the high mortality in these cases. The prominent symptoms of hyperplastic thymus are sudden attacks of dyspnea, accompanied by retraction of the subclavicular intercostal spaces. These attacks may be brought on by hyperextension of the head, which position draws the upper part of the gland under the manubrium of the

sternum, and the arching forward of the cervical vertebra diminishes the intervening space and compresses the trachea. The stridor thus produced is inspiratory, with a slight expiratory sound. In these attacks the voice is unchanged, showing that this peculiar condition is not produced by a disturbance of the recurrent laryngeal nerve. The percussion dulness in marked cases of hyperplastic thymus extends far down into the throat and may blend with that of the heart.

Aphonia and hoarseness will indicate interference with the superior laryngeal nerve, and it will often be observed that a goiter confined to one lobe of the thyroid will cause paralysis of the opposite superior laryngeal nerve. It has been strongly urged by Mayo that all cases for operation should have a careful laryngoscopic examination made, to determine the motility of the vocal cord, for a slight unilateral paralysis which has been compensated for by the increased activity of the other cord may be aggravated by the surgical operation, with symptoms of aphonia, which, without such an examination, would be attributed to injury to the nerve during the operation.

In conclusion, it would seem that in the examination of goiter, special attention should be directed to several important clinical features with the view to further differentiate the cases of toxic goiter which will materially aid us in the medical and surgical treatment. For this purpose it is advisable that, first, all cases of Graves' disease benefited by iodine or thyroid extract be carefully studied as to heart symptoms, blood examinations, blood-pressure, nervous symptoms and exophthalmos, and these results be compared with those types of the disease aggravated by this medication; second, that the toxic symptoms developing late in simple goiter be studied along the same lines and compared in like manner with those of typical Graves' disease; third, that an attempt be made by closely observing the cardinal symptoms of toxic simple goiter to divide these cases into two clinical divisions, the one characterized by hyperactivity and the other by diminished activity of the gland.

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PATHOLOGY OF GOITER *

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When one studies the symptoms of a diseased organism certain signs present themselves for consideration, and the underlying conditions that present these signs must be explained to the satisfaction of the observer or else he will materially err in his diagnosis.

Some conditions are brought about by physical abnormalities alone; others by certain chemical productions that produce certain signs and symptoms; and still others by a combination of the first two. So in the study of the thyroid pathology we may have any of the three conditions to deal with, or any combination of the three.

The early pathology of the thyroid is principally the pathology of deranged metabolism. The pendulum of physiologic balance is swung from its perpendicular to either the side of hypothyroidism or hyperthyroidism, and the organism is struggling within itself to maintain an equilibrium. One day we see the patient with all the symptoms and signs of a hypothyroidism, the next day we see the same patient with all the earmarks of a hyperthyroidism. In these cases the possibility of mistaken diagnosis is certainly great.

Another class of cases are those in which we see at the same time symptoms of hypothyroidism and hyperthyroidism, the clinical evidence being so nearly the same that it is with great difficulty to decide which side of the balance is the heavier. Such cases must be viewed from all angles in order to decide the true pathology in the given case and to avoid the pitfalls that await the observer.

Baumann was the first to isolate a substance from the thyroid, to which he gave the name of iodothyron, which is an organic compound of iodine produced in the thyroid from the traces of iodine ingested in the food and carried into the blood. According to Roos, it preserves the metabolic balance when injected into thyroidectomized animals.

In quoting from Alvarez in the *American Journal of the Medical Sciences*, July, 1910: "Although we are now recognizing certain symptom-complexes as of thyroid origin, we have much to learn as to the direct causation of the separate symptoms, many of which are plainly due to the accelerated or retarded metabolism.

as the case may be." In hypothyroidism, malnutrition of the nervous system, muscles and skin are prominent factors. Some of the symptoms of thyroidism are those of angioparalysis. Angiospasm may be present in the opposite disorder. It is also entirely probable that the thyroid secretions are composed of various elements and that some may be absent or diminished, while others may be normal or overabundant. This can help us to understand those cases in which the symptoms of hypothyroidism and hyperthyroidism are present at the same time. Pitfield suggests that the thyroid secretion may be as complicated as the blood plasma and that each element or substance has its special function.

There are two hypotheses proposed to explain the action of thyroxine on the general metabolism:

1. The function of the thyroid secretions is antitoxic, and it antagonizes an unknown toxic

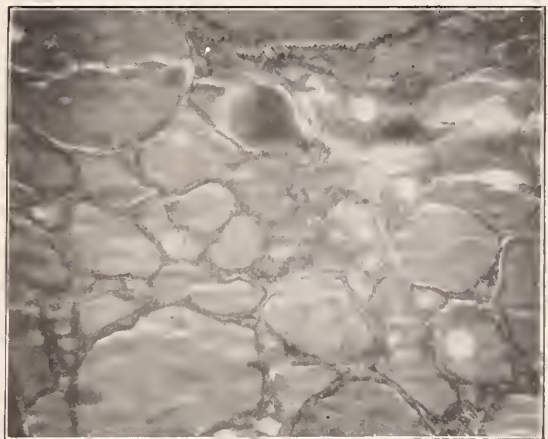


Fig. 1.—Normal thyroid.

substance supposed to be formed in the body during the process of metabolism. When the thyroid is removed or becomes diseased, this poisonous material, imperfectly excreted, accumulates in the blood or tissues and produces the symptoms of auto-intoxication.

2. The thyroid secretions act normally by promoting or regulating the metabolism of other parts of the body, particularly the nervous system.

We must not forget the importance of the interrelationship between the thyroid, ovaries and pituitary glands, more especially in young and pregnant women. So often do we see in young women who are about to menstruate and those of the first months of pregnancy an enlargement of the thyroid and symptoms of hyperthyroidism in varying degrees. "Amenorrhea and sterility are common in women suffering from

* One of the papers comprising a symposium on goiter presented before the Indiana State Medical Association at Lafayette, Sept. 23, 1914.

exophthalmic goiter because of the atrophy of the uterus and ovaries. Labor is not influenced in any way, although White claims that post-partum hemorrhages are more frequent, hyperinvolution may occur, the milk may be scant and of poor quantity" (DeLee).

The "relative Basedow's disease" of Bandler that is referred to in the foregoing paragraph is a good term for the condition, as he considers

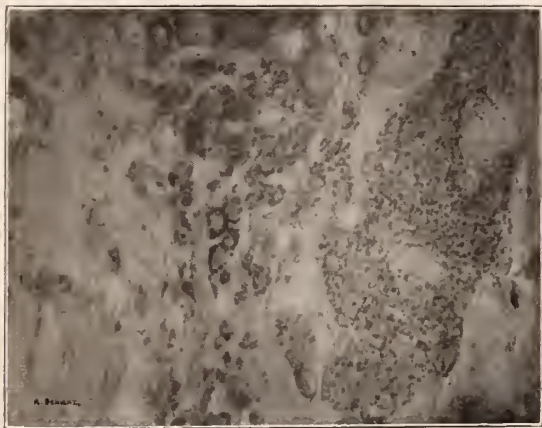


Fig. 2.—Localized area of malignancy and invading malignancy into normal structure.

the symptoms due to a relative hyperthyroidism. That the ovaries and the thyroid have an internal secretion that works in harmony, we know from Welles' experiments and observations, for after castration and at the menopause we have the "relative Basedow's disease," and the symptom-complex is that of hyperthyroidism; that is, rapid heart, vasomotor disturbances (hot flashes), loss in weight, neurasthenia, etc.

Welles gives the following citations to prove his point:

1. The greater size of the thyroid in the female.
2. The enlargement of the thyroid during menstruation and pregnancy.
3. The tendency to develop "relative Basedow's disease" during pregnancy.
4. The early atrophy of the thyroid after the menopause.
5. The loss of the sexual appetite in many thyroid diseases.

6. The greater number of women who are afflicted with goiter and myxedema (80 per cent. in each), and most cases of Graves' disease occur in the female (77.5 per cent.).

7. Halstead observes that bitches that have been thyroidectomized, when impregnated, show evidence of athyrosis as the time of parturition grows near, which soon disappears after the litter is born.

8. All pups of these litters have thyroids many times the normal size.

9. In old dogs thyroidectomy is neither fatal nor accompanied with unusual symptoms. Kocher points out that in old people postoperative myxedema rarely ever occurs.

10. Bandler claims that the nervous symptoms of the menopause are less annoying if the thyroid and the ovaries atrophy at the same time.

The above ten points are taken from the opinions of some of the world's best workers.

In taking up the diseased organ itself in regard to local diseases and local conditions, we will begin with the earliest pathology. Inflammation of the thyroid gland is practically never seen only in connection with other diseases in which metastasis has occurred. It has occurred in connection with streptococcic, diphtheritic, influenzal and typhoid infections. When the thyroid does become infected it usually ends in abscess formation, and if the abscess is drained at an early period resolution of the gland substance may take place. If allowed to remain in the closed condition, the abscess may rupture into the trachea, esophagus or mediastinum. The gland may be chronically inflamed in primary infantile atrophy and in older individuals without giving rise to myxedema or cretinism. There

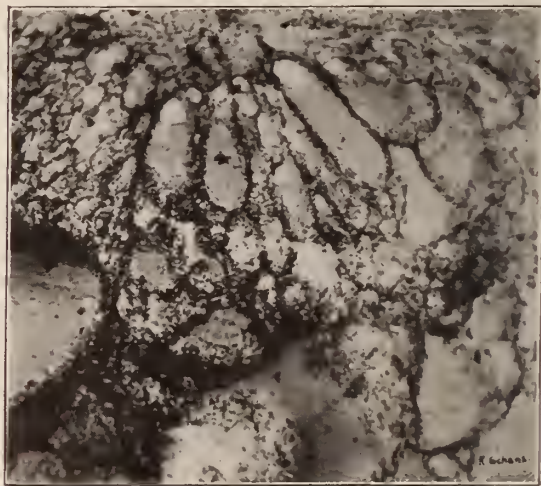


Fig. 3.—General view of mixed type. Exophthalmic with cystic degeneration and parenchymatous type of invasion.

is a parenchymatous degeneration with the development of connective tissue. Atrophy of the thyroid has been spoken of in connection with scleroderma by Hektoen and in ichthyosis by Moore and Warfield. Syphilis and tuberculosis are two diseases that must be mentioned in the passing; both are found but rarely.

There is but one degenerative change that is of any special importance, and it is the cal-

careous degeneration that follows the injecting of any irritating substance into the gland, although it is sometimes found in glands that have never been injected. Calcified areas are frequently found in large cystic goiters. Amyloid and hyaline degenerations are rare, of little importance and are usually found in connection with the same condition in some other part of the body.



Fig. 4.—Parenchymatous type showing two or three rows of cells in the cell wall of the alveoli and the packing of a single alveoli. Objective 1/6.

According to Ochsner, we cannot make a sharp distinction between new growths and hypertrophy in the circumscribed form of goiter. He divides the growth into two forms of simple goiter: (1) diffuse, (2) nodular.

In the consideration of the diffuse goiter we take first the gross appearance: If the whole gland is uniform, that is, both lobes and the isthmus equally enlarged, presenting a large uniform tumor, we call it a general diffuse goiter. If only one lobe is enlarged it may be called a lateral goiter (either right or left). If the isthmus only is involved, we may call it a central goiter.

We have two forms of diffuse goiter, the colloid and parenchymatous, which differ very much from a clinical standpoint. The first type, or colloid goiter, is one that is harmless in so far as hyperthyroidism is concerned, as the epithelium is no longer functioning owing to the pressure in the follicles having caused a degeneration of it. In the parenchymatous type we have the opposite condition existing. The follicles are filled with functioning epithelium, the blood-supply is rich, secretion and absorption goes on at a rapid rate and hyperthyroidism results.

In studying the colloid type more closely from a microscopic standpoint, we have the following condition existing: a distention of the follicles with colloid material, the epithelium flattened and thinned by the pressure. In many places the epithelium is entirely destroyed and the wall between two follicles broken through, giving rise to cystic formation. In many places we find where several cysts have ruptured into one large cyst. The harm these goiters do is due to the pressure they produce on the surrounding structures and their unsightly appearance. The colloid material takes the stain and at times undergoes calcareous degeneration.

The microscopic appearance of the parenchymatous type of goiter resembles very much the appearance of the fetal adenoma. The growth of the glandular tissue resembles very much that of tumor formation. Masses of cells are held together by bands of fibrinous connective tissue forming new follicles. The cells lining the follicles are of the cylindrical type, which grow in masses, crowding into the follicles and at times forming papillary growths. The amount of colloid material is small. The secreting surface is large, as is also the absorbing surface.



Fig. 5.—Picture shows complete transformation. In the upper right-hand portion of the picture is shown complete fibroid degeneration. The lower left-hand portion of the picture shows cystic degeneration. This shows a gland with two distinct physiologic conditions existing in the same gland, and is what is known as the mixed type.

The nodular goiter is one that may present almost any pathologic picture; in fact, during the past six months I have had the pleasure of examining a fresh thyroid that presented calcification, hemorrhage, hyaline and fatty changes, connective tissue growth and cystic formation. Unfortunately, this goiter was demanded by the family and no sections were obtained from it.

Exophthalmic goiter is a condition that may exist with certain types of thyroid hypertrophy, especially parenchymatous and papillary cystic goiter. It is attended with certain symptoms, such as tachycardia, tremor, exophthalmos, vasomotor disturbances, parenchymatous degeneration of the heart muscle, general weakening of the muscular system, etc. These symptoms are brought about by the absorption of the toxins from the overworking thyroid gland and the inability of the organism to neutralize the toxins. It seems that the toxins have a specific action on the nervous system. Microscopically, the important change in the gland is in the parenchyma. The increase is in the cell-layers or in papillary ingrowths in the alveoli. The very acute cases are very vascular, though the change in the size is not always marked. It is generally of a firm consistency. Massage of these glands may be

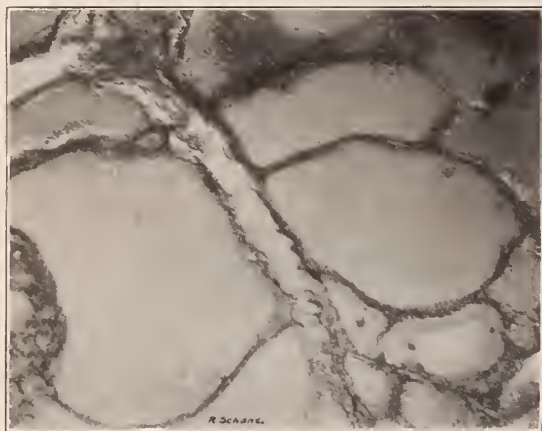


Fig. 6.—Pure cystic type of goiter under $1/6$ power showing the thinning of the cyst walls and stainable colloid.

attended with very serious results, and great care must be exercised in their manipulation. The more acute the symptoms the more care should be exercised in handling and manipulation. In cases of the mixed type massage will many times aid in the diagnosis.

Primary malignant tumors of the thyroid are very rare, though there are a few cases on record. They may occur at any age, and are more frequent in women than men because more women have thyroid disease. Pick has written some very interesting information on this subject.

I wish to thank Dr. H. A. Duemling for the material and the use of his laboratory for the preparation of this paper; also Dr. Grandy for his aid, and especially Mr. Robert Schanz, senior medical student at the University of Michigan, who made all the microphotographs.

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GOITER: SELECTION AND PREPARATION OF SURGICAL RISKS *

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LAFAYETTE

It is only within a comparatively few years that the operation of thyroidectomy has been practiced to any great extent. Owing to the great vascularity of the thyroid gland and our lacking knowledge of its physiology, operation for its removal was considered dangerous. In fact, the early operations in the hands of skilled surgeons gave a mortality of 25 to 30 per cent.

So little was known of the benefits to be received surgically that most physicians and surgeons were content to treat their cases medically, many following routine treatment of rest, with iodine in some form, without regard as to whether it was hypothyroidism or hyperthyroidism. The results were that many patients went on suffering, without treatment. Those who were treated were benefited in some instances and in others the symptoms were exaggerated. Since goiter is a chronic disease, the patient was often relieved after passing through the acute exacerbations, lasting intermittently about three to four years, and enabled to live with some comfort, providing other organs had not become diseased. Others in passing through this condition developed so many degenerative changes that death was the penalty.

In more recent years, especially the last decade, there has been much advance in the study of goiter. Kocher of Switzerland, C. H. Mayo and Halsted of this country and others have done much to enlighten the profession on this subject. Much is due to such men in bringing about classification of cases and selection of surgical risks, which has largely reduced the high mortality of thyroidectomy to its present standing, that of less than 1 per cent. in simple goiter and 1 to 4 per cent. in hyperthyroidism. In addition to this lowered mortality there is a record of about 75 per cent. complete cures and 20 per cent. improved conditions.

In the selection of cases for operation, we must first consider the benefit to be derived from operation in each case, also the danger of operation. In the non-toxic, non-malignant and simple goiter we have the enlargement without

* One of the papers comprising a symposium on goiter presented before the Indiana State Medical Association at Lafayette, Sept. 23, 1914.

serious constitutional symptoms, and find these cases most amenable to treatment, with less liability to recurrence than any type of operation.

Many patients come to operation for cosmetic purposes alone. Others have mild or severe obstruction of respiration, from pressure on the trachea, and should be operated on account of this dyspnea. Since these cases are mostly diffuse colloid or adenoma, it is better to perform double resection. Again, we may operate them on account of suspected malignancy or degeneration with absorption of toxin, which cripples the heart, kidneys and liver in later years.

Thyroidectomy is contra-indicated in disease of the thymus and other organs, such as nephritis, myocarditis, cirrhosis of liver and glycosuria if not transitory. The majority of cases of hyperplastic thyroid have the hypertrophied thymus, but not usually in the most serious ones. In enlarged and hyperplastic thymus we have sudden attacks of dyspnea, which contra-indicate thyroidectomy on account of the very high mortality from tracheal collapse. The only chance of success is during the initial period of the disease. In substernal goiter with pressure symptoms, operate early; this applies also to cystic goiter with symptoms of tracheal stenosis. The goiter of adolescence should rarely be operated, as it will usually disappear either with or without treatment. Medical treatment is very successful in this condition, which is of rather an edematous type of colloid. If we have the symptoms of goiter, but have no hyperplasia nor exophthalmos, we should not operate, for the patient will not receive benefit. In this case we must look to some other ductless gland, such as adrenals, thymus or hypophysis, as causative factors.

Operations in cases of hyperthyroidism require very strict preliminary care in selection of risks, as the general physical condition of the patient is usually poor, which greatly complicates such a case. At times it is very difficult for the physician, much less the surgeon, to see the case in the early stages of the disease and at a time most feasible for operation. Many of these patients who have had hyperthyroidism for some length of time will not be restored to good health by thyroidectomy, on account of the various terminal degenerations having taken place before the operation, they being due to the disease. The serious cases of hyperthyroidism must not be considered emergency cases, and operation should be delayed until the acute symptoms disappear. Operation may be performed early in the attack,

before the severe symptoms appear, or after the attack subsides.

One of the first conditions to be noticed in the exophthalmic goiter, even before heart symptoms, is the weakness of the patient as manifested by placing his hands on the chair seat, behind him, for support while sitting. This symptom is present in the majority of cases. They cannot go upstairs on account of lack of action of the quadriceps-extensor muscles. Tide these patients through the acute attacks.

In the early period of the disease we have a toxin acting directly on important organs, especially the central nervous and vascular systems. Later this is intensified by the interaction of those organs where function has been disturbed by the toxin. The order of onset of the more important symptoms, as shown by Mayo,¹ is as follows: cerebral stimulation, vasomotor disturbance of the skin, tremor, mental irritability, tachycardia, loss of weight, cardiac insufficiency, exophthalmos, diarrhea, vomiting, mental depression, jaundice and death. These symptoms may vary somewhat, but in the majority of cases they follow this order.

In case of hard and irregular growth of thyroid which has been rapid, we usually have carcinoma or sarcoma of the gland, yet may have a similar condition in an old simple goiter. This gland must be operated early, on account of free metastasis with the lymphatics and lungs, in order to remove the disease and prevent recurrence. In case disease is confined to the capsule, the whole gland should be removed at the very first opportunity. Operation is not advisable in late malignant disease of the thyroid gland with involvement of lymphatics, except for relief of symptoms of pressure, since it will have a tendency to hasten development of the growth. Severe or acute cases of hyperthyroidism, with nervous manifestations, degeneration of heart muscles with irregular pulse, low blood-pressure or periodic attacks of delirium cordis, should not be operated on, but referred for medical treatment.

Following partial thyroidectomy for hyperthyroidism, we may have a small percentage of patients who relapse, after a number of years, with an increase in size of remaining gland tissue. This patient should be treated medically, and if not rapidly improved, the first procedure will be to ligate the vessels at the superior pole. Later, should this reduction of blood-supply not

1. Mayo: Surg., Gyn. and Obst., March, 1914, pp. 322-325.

restore these patients to their former healthy condition, a part of the enlarged gland may be excised with very little risk.

The mortality following operation for hyperthyroidism has been very greatly reduced, this fact being due more to the better preparation of patients, time, type and extent of operation, which can be performed in several stages, than to any details of improved technic. The majority of goiter cases can safely undergo thyroidectomy at the time they are seen by the surgeon. Extreme conditions may require medical preparation. In cases of excessive activity of the disease, we should wait for the symptoms to subside, meanwhile using medical treatment, such as rest, Roentgen ray, belladonna, etc., giving special attention to the nervous system, heart, intestines and kidneys, as the individual symptoms may require. Iodin is best given in cellular hyperplasias and the early colloid type, and is not usually beneficial, but harmful in severe cases of hyperthyroidism. The gland will often respond to thyroid extract when iodine in other forms is without avail. Insist on regular simple life for several months after patient is able to be out, thus avoiding shock to weakened heart muscles. The most severe disturbance we have is an acute attack of tonsillitis. So we must look carefully after the tonsils to keep them in a healthy condition. In acute cases of Graves' disease, resisting treatment, where thyroidectomy is not at the time advisable, injections of boiling water, as advocated by Porter,² may be used with beneficial effects. In the more severe cases ligate the superior thyroid arteries, first the left superior thyroid, which may be followed by ligation of the right superior thyroid artery in about a week. At this time if the shock is not too great from the ligation, we may successfully proceed to remove a portion of the gland, otherwise it is better to wait for several months, when we will usually find marked increase of weight and great improvement in the patient's condition, as well as in the goiter. Occasionally we may perform double ligation of superior thyroid arteries at one sitting with good results. Ligation of the inferior thyroid artery is advocated in those cases of severe relapse following a partial thyroidectomy. In those goiters associated with great nervousness, Crile concludes that fear or psychic shock is a great factor of danger. He gradually accustoms the patient to the inhalation of aromatics dropped on the ether mask held over the face, using a little ether at times. Finally when anesthesia is complete the patient

is taken to the operating-room and operation performed. In order to prevent trauma causing a nerve impulse and ejaculation of thyroid secretion which might be absorbed, he blocks the nerves of the gland by local anesthesia. Complicated cases are often carried through by means of a local anesthetic of 0.5 per cent. novocain solution, with the addition of a little adrenalin. This may be combined with a general anesthetic, having the advantage of reducing the amount of ether required. Ether is in most cases the anesthetic of choice. In severe cases of hyperthyroidism we often have a distinct advantage in the use of 1/200 grain scopolamin with 1/6 grain of morphin an hour before operation. In case the patient shows an idiosyncrasy to the drug, the operation must be postponed for a day to permit elimination.

In all cases taking ether as a general anesthetic, it is advisable to use 1/100 grain of atropin some time before the operation to produce a dryness of the trachea and pharynx.

GOITER: SURGICAL TREATMENT *

H. H. MARTIN, M.D.
LAPORTE

The symptom-complex of a thyrotoxicosis, while receiving more consideration from the profession at present than ever before, is still but little appreciated by many, indifferently regarded by a few and thoroughly understood by none.

That the thyroid is, among other things, a sex gland; that it has to do with defense and the establishing of immunity; and that, together with the adrenals, it exerts an influence on the general vascular system, are now well-proved physiologic facts.

Infants born without thyroids or in whom the thyroid atrophies, develop at an early age a condition known as cretinism. Adults relieved of over five-sixths of their thyroid gland, or who have had over five-sixths of the functioning thyroid destroyed, develop myxedema.

Regardless of its importance, the thyroid is subject to more pathologic changes than any other tissues with which we are familiar. Each change is capable of producing, and does produce, a definite train of symptoms, corresponding to the severity and constancy of the change taking place in the gland. Thus we have, with true

* One of the papers comprising a symposium on goiter presented before the Indiana State Medical Association at Lafayette, Sept. 23, 1914.

2. Porter: Jour. Am. Med. Assn., 1913, lxi, 88.

hypertrophy followed by true hyperplasia, an acute train of symptoms, definite in character, developing in quite a systematic order, depending in severity on the time and amount of the pathologic changes taking place in the gland, which symptom-complex is known as exophthalmic goiter.

Again, we have the toxic non-exophthalmic goiter produced as the result of the sudden development of fetal cells, known as "Wofler's Rests," or the development of excapsulated adenomas, or, as in many cases, enlargement of the gland due to retained colloid secretion. The symptoms produced as the result of these changes are chronic in character, in some respects resembling the exophthalmic type, but seldom producing true exophthalmia. We see it also, in many subjects, producing clinical manifestations so closely resembling the cardiovascular symptoms produced by other intoxications, that only with difficulty can we differentiate one from the other. These are equally capable of producing grave pathologic changes in the vascular system, heart, kidneys, etc., which are manifested at or just past middle life, or at the time when so many of our bright, energetic business men and women are so apt to break. It would, indeed, be very interesting to know the part that this strenuous Americanism is playing in developing pathology of the thyroid gland.

The thyroid in man is developed entirely from a single bud of epithelium from the pharynx, between the first and second pharyngeal grooves.

In early fetal life we find the gland in tubal connection with the pharynx, which tube closes just before the dissociation of the "anlage." The "anlage" then becomes a broad band of tissues, stretching transversely in front of the pharynx. Failure of its complete descent leaves the superior portion as lingual, sublingual or suprahyoid. Or a portion of the thyroid may be drawn from the third embryologic groove by the thymus and lodged substernally. The midline cysts of the neck are produced by a small amount of mucosa becoming detached and entangled with thyroid tissue and drawn from its normal position.

Surgically considered, every goiter should be operated, after medical treatment has failed, or, as is so often the case, after making it actually worse.

Many cases of mild hyperplasia, producing mild symptoms of hyperthyroidism, will recover spontaneously, or with rest, proper hygienic and dietary treatment. Unfortunately, many cases of the non-exophthalmic type, as well as some of

the exophthalmic, are treated medically until such grave pathologic changes have taken place in other organs that surgical treatment cannot be instituted at all, or with much added risk, and then with only a moderate assurance of success. If this class, by rest and general hygienic treatment, etc., cannot be rendered fair surgical risks, they should be dismissed rather than be allowed to jeopardize the standing of the necessary surgical procedures.

Many of the cases of acute Graves' disease, and not a few of the non-exophthalmic type which have been allowed to drift until they have become desperate, can be made fair or good surgical risks by the ligation of the superior thyroid arteries. The accompanying veins and sympathetic nerves should be included in this ligation.

In practically every case this can be accomplished by infiltrating the tissues with 0.5 per cent. solution novocain, supplemented by morphin alone, or by morphin and scopolamin. Following this procedure these cases will, as a rule, for the first twenty-four or forty-eight hours show a marked reaction, but by the end of this time improvement will have set in, and for the next few months will be constant. These patients generally gain from 20 to 30 pounds by the end of the fourth month, and are then fair risks for further surgical interference. If, however, the desired change does not take place, the injection of a few drams of boiling water, as recommended by Porter, should be practiced. This, by destroying a portion of the secreting gland, will most frequently bring about the desired result; that is, change the case from a desperate to a fair surgical risk.

When a general anesthetic is indicated, we have never employed any other than ether, supplemented with morphin, or morphin in combination with atropin or scopolamin.

By carefully selecting our cases, which, in my opinion, constitutes a large percentage of the successful surgical treatment of goiter, we have never found it necessary to change to another anesthetic. At the same time we deem it absolutely necessary that no one but a trained anesthesiologist be employed in this, as in all surgical work. With some patients it is advisable to combine the local with a general anesthetic. If it is necessary that the local anesthesia continue for over fifteen minutes, adrenalin should be added to the novocain solution, which solution may be boiled without detracting from its efficiency.

One great advantage in operating thyroid glands under local anesthesia is the ability of

the patient to phonate. When one is operating in the region of the recurrent laryngeal nerve, and its location cannot be definitely determined, the ability on the part of the patient to articulate acts as a safeguard for its protection.

In operating on large substernal goiter, where pressure symptoms have been present for some time, one should ever be ready to do a tracheotomy. In some of these cases, where the trachea has been compressed, producing stenosis, the trachea will collapse after the removal of the sustaining gland. In these cases, if immediate relief is not brought about by opening the trachea, death very quickly follows. After respiration has become reestablished, it is quite safe to close the tracheal opening at once.

Transplantation of the thyroid has given such uniformly poor results that it, in our opinion, should not be considered at this time.

In summing up the surgical treatment of goiter, we wish to emphasize the following:

1. All cases of goiter producing symptoms which have not improved, or have been made worse by medical treatment, should be operated.

2. The case that does not show improvement by rest, diet and general hygienic treatment, the heart still bad, remaining dilated, kidneys bad, prostration and general muscular weakness marked, mental and nervous balance not reestablished, should not be operated.

3. In acute cases of Graves' disease, if the heart is showing 1 inch or more of dilatation, the ligation of the superior thyroid vessels should be practiced, to be followed by further surgical procedure as is indicated.

4. Boiling water should be injected into the gland substance if the necessary improvement does not follow ligation.

5. It is possible to operate many goiters under local anesthesia, one-half of 1 per cent. novocain having given the best results with us.

6. If a general anesthetic be necessary, none but one well trained should attempt to or be allowed to administer same.

7. Some cases of very large goiters or substernal goiters producing pressure symptoms, can be made more favorable risks by ligating superior thyroid arteries. In these cases the artery alone should be ligated.

DISCUSSION OF THE SYMPOSIUM ON GOITER
(PAPERS OF DRS. WETHERILL, RAWLES,
THROCKMORTON AND MARTIN)

DR. C. STOLTZ, South Bend: So far as the subject of goiter at the present time is concerned, it resolves itself into the thyroid being at the

base of the difficulty in exophthalmic goiter. The theory advanced by Widal's nearly three decades ago that the elements developed in the thyroid gland are the cause of the symptom-complex, or lie at the bottom of the symptom-complex, in cases of exophthalmic goiter, has been severely attacked at times, but has never been very severely disturbed. Therefore, in considering the subject of exophthalmic goiter, as well as the subject of non-toxic goiter, it reduces itself very largely to a surgical proposition. As far as I know, absolute rest in bed is the best non-surgical treatment, either preparatory to operation or otherwise, for exophthalmic goiter. It is perhaps the thing that we have to rely on more than anything else in preparing our patients for operation when they are not in proper condition to operate on, and if the patient is not operable that is about the only treatment that is left for the patient. When it comes to the operation for goiter, I think many of our failures are based on the fact that our patients have been allowed to go on from bad to worse, being treated with this, that or the other remedy, until they are not even operable. The operation for goiter, it seems to me, is one of the operations that must be done with more deliberation and more care than almost any other surgical operation. There is no place in the treatment of goiter for spectacular operating. Everything must be thought out carefully, the patient must be well studied beforehand, the surgical risks and the possibilities well considered, and then when it comes to the operating-table the work must be done in a thorough, careful manner. It makes no difference how familiar you are with the anatomy of the thyroid gland and the anatomy of the neck, you may get into unexpected conditions that will tax your ingenuity and your skill to the utmost.

One of the essayists made the point in reference to swallowing as a symptom in differentiating malignant goiter from non-malignant, which was a very good point in itself, but I want to call your attention to an exception. Where you have a large retrosternal goiter you will find that symptom absent sometimes. In a case operated on recently I had such a condition, in which a large spur of the right lobe was tucked away behind the sternum and held the goiter from making this movement in the neck when the patient swallowed, and caused me some little confusion; but when I found this large mass behind the sternum I soon found the reason for the immobility of the gland.

There is one thing about goiter work that is radically different from almost any other kind of surgical work. For instance, in an operation for cancer, we go at it deliberately, and we hope to do the most radical and thorough one-stage operation we possibly can. Nobody to-day would think of attacking any malignant condition by

repeated operations. But in goiter work I think we have an absolutely opposite course to follow. There is nothing that has developed along the line of goiter work better than the rational procedure of going at the goiter by slow stages; that is, first tying off some of the blood-stream, then later tying off a little more of the blood-supply, then removing part of the gland, and if necessary removing more. Along that line I think is the indication for our best work to-day.

DR. THOMAS JONES, Anderson: If the theory of Widal's is to be accepted, that is, the theory of excessive thyroid extract causing hyperthyroidism, then we really have a radical condition for surgery or medical treatment. As has been said, this theory has been attacked, but we have nothing better offered, and until we have a better working knowledge of this most interesting condition, we are bound to accept the theory of hypersecretion as the fundamental cause. There are many things that cannot be explained by this theory. One of the most striking is the appearance of acute hyperthyroidism after the total removal, or at least the removal of five-sixths of the gland, coming on from twelve to forty-eight hours after operation and generally resulting fatally. Another circumstance which is now coming to light is the appearance of hyperthyroidism following total removal of the gland. If the hyperthyroidism is due to excessive secretions, then why is it now recurring, say from four to six years after the gland has been removed? I have one such case in mind in which the gland was removed, practically the entire gland except the isthmus. The patient made an uneventful recovery, and now, five years after, the symptoms are recurring. They say the pathology is still unsettled. To my mind goiters can be divided into two or three groups: one is the hyperplastic, or exophthalmic goiter; another is the toxic, or non-exophthalmic, which is characterized by an atrophy; and then there is the great class of simple goiters. In true exophthalmic goiter we have a condition manifesting itself at an average age of from 30 to 35 years, with symptoms of the toxemia coming on rapidly, say from four to six months after the appearance of the goiter. This form is rapid in its progress and easy of diagnosis because of the exophthalmia. On the other hand, we have another class which is toxic, or non-exophthalmic, which comes on early. The goiter makes its appearance at the age of from 14 to 15 years or up to 20, and the symptoms of toxemia do not appear until fourteen or fifteen years afterward. It is this class of goiters in which a mistaken diagnosis is most apt to be made. If the symptoms are severe, the diagnosis is comparatively easy, but in the mild, recurring cases, where we find the symptoms recurring after mental excitement, they are very difficult to diagnose. Very often a

mistake is made and a simple case of digestive or kidney trouble or chronic alcoholism can be mistaken for thyrotoxicosis, and very often these cases are subjected to operation without result.

The boundary line between the medical and the surgical aspect is hard to follow. Dr. Osler, on the one hand, is a radical exponent of operation in all cases of goiter, while, on the other hand, we have Strümpell and Dieulafoy, who are radically opposed to surgical operation, both men substantiating their belief from their own experiences. But I think we as Americans cannot lose sight of the brilliant results that have been obtained in some of our surgical clinics, as the Mayos, who report 95 to 96 per cent. of cures after an operation. But even now some of these cases are returning after four to six years with recurring hyperthyroid toxicosis, and I believe until the etiology and pathology is on a firmer basis we will have to accept the theory of Widal's. I do not mean to say that they are not medical, but that if surgery is to be resorted to they must be operated on early, before the condition causes such ravages that Nature cannot bring about a cure.

DR. D. N. EISENDRATH, Chicago: The cases which Dr. Jones has just spoken of have interested me greatly for the last three or four years. I have had similar experiences in cases in which the superior and anterior thyroid arteries were ligated and the lobes were extirpated, and still the exophthalmic symptoms continued. How can we explain such cases? Dr. Throckmorton referred to the matter of the thymus, and those who are interested in this subject I can refer to an article which has just been published by Halsted in the *Johns Hopkins Bulletin* for August. You will find there a thorough review of this particular phase of the dark side of hyperthyroidism. Why is it that in a certain proportion of these cases we get bad results? The thymus and its presence simply explain a greater proportion of these poor results. We now know that under certain conditions—we do not know why—but that in certain individuals the thymus will persist throughout life as a gland which is almost as large as the normal thyroid. This thymus has as its function the secretion of a substance which is almost identical with the secretions of the thyroid, and we can easily see how under perverted conditions a toxic substance would be thrown out by the thymus, and that this interrelation between the thymus and the thyroid will explain a great many of these cases. It has been found that some of these cases of exophthalmic goiter which die suddenly after operation, and even some of those which die before operation (I had one case which occurred last week in Chicago, where the patient was being prepared for operation for exophthalmic goiter) die suddenly, with

symptoms perhaps of a slight dyspnea. The autopsy in that case, I was told by the pathologist, showed a very marked enlargement of the thymus. Now I believe these sudden deaths can be ascribed to the presence of the thymus and the toxicosis, you might call it a thymus toxicosis, which it produces. It also explains why a certain proportion of these cases of hyperthyroidism on which we operate are not successful. There is a factor to reckon with that we have not considered much up to the present time.

How are we to know that in a given case of hyperthyroidism the thymus is going to cause us trouble? That is the great problem at the present time. There are two ways to diagnose the presence of a persistent thymus. One is by percussion, which in children is comparatively easy. In percussing for the thymus in children the thymus will enlarge to the left of the sternum as far as the manubrium—rarely to the right. That is one method, but it is not easy in adults unless the thymus is very marked. Another method, but one which still requires work, is the Roentgen ray. I have seen a number of cases in children where in the Roentgen-ray pictures the shadow was quite distinct, the enlargement of the thymus filling up the space and extending to the middle of the manubrium. Under normal conditions the thymus in a child is considered to be of proper dimensions if it does not extend beyond the shadow of the sternum. If it extends beyond that it must be considered as an abnormal thymus. By fluoroscopic examination is another way, and yet there are a certain proportion of cases in children in which we cannot find an enlarged thymus, and the theory has been advanced that the thymus is enlarged from anterior to posterior, and not transversely. That may or may not explain these cases. I call your attention to it because this is a new phase with which we must reckon.

How shall we treat these cases? In this article by Halsted he says a certain number of these cases have been treated, especially by Garre of Bonn, by the removal of the thymus, a removal which can be done by making an incision above the suprasternal notch, and then simply pulling out the gland and removing it in that way.

DR. MILES F. PORTER, Fort Wayne: The statement is made by one of the essayists that malignant diseases of the thyroid produce usually irregular tumors, whereas in hyperplasia of the thyroid they are usually regular. I want to call your attention to the fact that this is not correct so far as concerns especially sarcoma of the thyroid, which, however, is very rare. There is another feature regarding the irregularity of the tumors, and that is that these malignant tumors are almost invariably developed on

old goiters, so that if in a given case of goiter you have a sudden development of acute symptoms, whether they are toxic in character or mechanical in character, involving the enlargement of the gland, the suspicion at once arises in the diagnostician's mind that we have now to deal with a malignant condition engrafted on a hyperplasia or hypertrophy of the gland.

Concerning the preparatory treatment of cases of thyrotoxicosis for surgical operation, I would like to say that I have a feeling that rest is not so much a remedy for the cure of thyrotoxicosis, nor so valuable as a remedy, as it is valuable as an indication and a help toward a correct prognosis, and an estimate of a correct line of treatment. What I mean is this: Given a patient with a thyrotoxicosis or hyperthyroidism—call it what you please—who does not get well under absolute rest, and the assumption at once arises that degenerative changes have been caused by the thyrotoxicosis which will make it impossible to get what we would call a complete or satisfactory cure by any means, and therefore I want to make the point again that rest is not so valuable as a treatment as it is as a means of arriving at a prognostic estimation of the treatment of these cases.

I would like to call attention to one other point, and that is the apparent association of thyroid trouble with the intoxication of pregnancy. Many of these cases of intoxication of pregnancy are the result really of a diminution or interference, and I think the weight of evidence is in favor of a diminution of thyroid secretions. A woman presenting severe toxic symptoms in the presence of pregnancy should be suspected of having an underactive thyroid gland. Many of these cases can be relieved by the administration of desiccated thyroid.

Regarding ligation, when we stop to think that the thyroid gland receives about twenty times as much blood as the head and neck; that all the blood of the body can pass through the thyroid in an hour, we do not wonder that ligation does not amount to much. The fact is that experiments have shown that ligation of the inferior or superior thyroid artery produces a very ephemeral wave of lessened circulation which is entirely overcome after a few hours. If a ligation is made at all it should be a polar ligation, so that the ligation takes in not only the vessels going to, but vessels coming from, together with the lymphatics; see that you make your ligation so that you have left no way around for your circulation to be re-established. I think the term lobectomy has gotten us into a whole lot of trouble in the treatment of exophthalmic goiter. The removal of a hyperactive thyroid gland should, if undertaken at all, in my opinion, result in the removal of at least five-sixths of the gland

or more, owing to the amount of the hyperplasia you find there. You cannot speak in figures very well. If you have a general hyperplasia of the gland—and you may have—and in leaving one-sixth you leave a whole lot more than the individual needs, it is bad. But generally speaking, if you remove five-sixths or nine-tenths of the gland you will not have removed too much, and if you do not remove that much you will remove too little, and the removal of too little of the gland has been the cause of a great many failures in the surgical treatment of these cases.

The toxic symptoms after surgical interference can be prevented very largely in the first place by the delicate handling of the gland during removal; second, by shutting off all the circulation in the early stage of the operation, and in the third place by using boiling water or Herrington's solution, or something of that kind, as an application over the raw surface from which the gland has been removed. We used to look for this postoperative intoxication, but now I venture to say it rarely occurs in the hands of experienced operators.

DR. J. RILUS EASTMAN, Indianapolis: I picked up a few *motifs* in listening to the papers and discussion, of which I would like to speak. I have been impressed with the fact that we know little about the physiology of the thyroid gland. We know that it relates in some way to the circulation and blood-pressure; we know that it has some relation to sex, that in the sea scorpion and king crab is a duct that leads from the thyroid gland to the uterus; we know that the thyroid gland relates in some way to growth; we know that if thyroid extract is injected into a tadpole it will turn into a frog, and we know if this extract is injected into a frog it will not turn it into a tadpole.

I wish to sustain the point made by Dr. Eisen-drath in his very admirable presentation, expressing a doubt as to the advisability of undertaking a thyroidectomy as a common operation, because sometimes the thymus gland is so situated that the average surgeon would have considerable difficulty in cutting it out.

As to the recurrent laryngeal nerve, Dr. John Berry of London ligates outside; he says he does not attempt to go inside, because we should know where the recurrent laryngeal nerve is, and although he operates under a local anesthetic, he does not ask the patient to speak during the operation, because he is sure he will not interfere with the recurrent laryngeal nerve—and he gets away with it; but I doubt whether most of us could do that. It is entirely proper, with local anesthesia, to ask the patient to speak, in order that we may be sure, because I submit that the recurrent laryngeal nerve is injured more often than we realize, and if we are not sure that

both vocal cords are in good condition, we may injure the recurrent laryngeal nerve on the side on which we are operating and entirely destroy the ability of the patient to phonate.

As to the selection of an anesthetic, I believe more and more every day in a general anesthetic for a major operation, and having seen Kocher and Berry and Lane and the Mayos and others who do a great deal of goiter work, I am more firmly convinced than before that ether should be the anesthetic of choice, and that we should have very rare recourse to a local anesthetic for an operation on the thyroid gland. If I had a thyroid gland to be removed I would much rather endure the shock of a general anesthesia than to endure the shock of an operation with a local anesthetic. It reminds me of a story told by Robert Jones of Liverpool regarding the first use of cocain as an anesthetic in England. It was given a man for a minor operation, and after the operation the surgeon asked his patient if he had experienced any pain. The man said: "No, no; really there was no pain to speak of." "But," the surgeon asked, "can't you tell us something more definite? Can't you intimate to us in some way about how much pain you felt—something that will show the usefulness of this new agent?"

"Well," the man said, "I will tell you. I was once torn by lions. It was a bit worse than that."

So, as a matter of fact, if you will watch the work of Kocher and Berry and others who use a local anesthetic, you will find their patients do suffer pain and from shock. It is a good deal, after all, as Dr. Mayo says, in the selection of the anesthetic for goiter surgery—a good deal less depends on the need of the patient than the idiosyncrasy of the surgeon. An anesthetic is selected which pleases the surgeon, as a rule, not the anesthetic which is best suited to the needs of the patient.

DR. ALBERT E. STERNE, Indianapolis: I have been for a great many years of the opinion that after all is said and done, every surgical procedure in either exophthalmic goiter or the non-exophthalmic type, is an empiric procedure. I do not believe that the best surgeons, the men who are doing the greatest amount of thyroid work, like Kocher, Mayo, Crile and others, take the stand that they absolutely cure these patients of the fundamental disease. They do take the stand that they benefit the individuals through the removal of a factor which causes a great deal, if not the major portion, of the clinical malignancy which is manifest. They do not assert, and I do not believe it can be safely asserted, that individuals who have been operated on are clinically free of further manifestations of an infection of the nervous system, particularly that portion which we know so little of—the so-called sympathetic nervous system. Something lies

behind this whole question which we have not yet unearthed.

Dr. Wetherill wisely alluded to the association of other ductless glands with the thyroid in dysfunction. The chances are that in none of those cases which the neurologist so often sees are the glands disassociated from one another. There is a dysfunction present which we have as yet not clearly solved, but which is clearly manifest. Another point on that is the indirect relation of the surgical side, particularly the operation under local anesthesia. Even before Crile's very beautiful study was made public, it was a well-known fact to clinicians and neurologists that a great many of the conditions which arise in the exophthalmic type of thyroid disease were identical with the symptoms arising from fear, shock or grief, particularly fear, and that the clinical syndrome of fear is very similar to the syndrome of exophthalmic goiter, minus certain physical peculiarities which are present in the latter, and which can be predicated acutely through fear. It is in just these cases, knowing well the effects of fear, that the wise surgeon would say, "Will I add to that syndrome of fear by using a local anesthetic?" It is a terrific shock to all of these patients, even those who are of the male sex, who undergo an operation of this kind unnumbed by a general anesthetic. While we may not totally numb the recording sections of the brain through a general anesthetic, still we paralyze fear to such an extent that it is infinitely better, I believe, for the future of the patient, to use a general anesthetic—combined with a local anesthetic for blocking purposes—than to use a local anesthetic alone. I believe the future is infinitely better safeguarded.

In conclusion, let me say that I believe Dr. Porter's discussion as to the quality of rest in these cases is eminently good. We have all of us put our patients under prolonged rest, sometimes with good results and sometimes with poor results. My own practice has been for years this: That if a patient did not promptly (that is, in the course of a few days or a couple of weeks at the most) show improvement under enforced rest, under enforced quiet, with the use of ice-bags as a rule in association, with just as little medication as possibly could be given—none at all if we possibly could avoid it—if they did not promptly improve, then they were not good surgical risks. Furthermore, that if they did improve, I always held in reserve the operation, seeking to convert a poor surgical risk into a good one, and no case is a good surgical risk whose heart muscle is in bad condition. These cases will perhaps be subject to the most conservative surgical procedure that can be given, and of these partial ligation is the best. Terminal ligation I do not believe is of value at all.

DR. A. C. KIMBERLIN, Indianapolis: Just a word from the medical side of this question, especially in the matter of clinical diagnosis. It is a comparatively easy matter for any of us who have a case with typical symptoms to make a diagnosis and consign the patient to a surgeon who is thoroughly capable of taking care of the case. But on the other hand, I regret to say, the average medical men are in many instances totally unable to sharply differentiate, particularly in the diagnosis of a case of hyperthyroidism. We are dealing with a disease, the fundamental origin of which is one or the other of the ductless glands, and they play such a medley of symptoms that neither statistics nor imagination can enable us to diagnose with certainty every case of incipient hyperthyroidism. I must say, with all courtesy and respect to surgery, for we could not do without it, that I feel that much of the failure that has been shown in our statistics could be directly attributed to faulty diagnosis.

If we take into consideration that the very first symptoms of hyperthyroidism involve the nerve centers; when we stop to think how much importance we attach to the vasomotor system; when we think what this relation between the nervous system and the vasomotor system is, then we feel how difficult it is to take a case early and make a correct diagnosis. Take a case of incipient tuberculosis. There has been nothing said to-day about this, but there must be a very intimate relationship between incipient tuberculosis and the enlargement of the thyroid gland. Take our cases of nephritis. I do not believe a man lives who is so keen and alert and experienced in differential diagnosis that he can in every instance take a case that is carrying an enlarged thyroid with a beginning nephritis and toxic manifestations, and say, "That case is especially suited for surgical treatment—that can be managed better from a medical standpoint." Take our grosser intestinal manifestations, and they are so much like thyroidism in some instances that nothing but complete blood examination makes it possible for us to be accurate. Take occupational neuroses. A little more than a year ago I had a school teacher, a fine young girl, who came with, as I thought, a typical picture of hyperthyroidism. I told her so. We went along with rest and a little medicine, and she got better. This season the same thing occurred, and I began insisting that she should consult a surgeon. This she did not want to do, so I had her go home and rest and I took a new tack. I told her I was going to treat her for some intestinal trouble; I forgot all about the surgery; I told her her symptoms were changing, and I did everything in my power to persuade her to my way of thinking. After she had had some rest, after I had assured her that she was not a surgical risk, that her heart sounds were much better, the enlarged

gland began to subside, she began to gain in weight, and to-day that girl is in absolutely perfect health. I know now it was nothing but an occupational neurosis; nevertheless, she has an enlarged thyroid.

One thing Dr. Porter spoke of, and that is the question of rest. It is very interesting to know what rest means. I have been trying it myself. To put a patient in bed at home or in a hospital means nothing at all unless you put that patient's mind at rest, restore his confidence and instill him with hope. But do not put him to bed and tell him all his bad symptoms; that there is a possibility if he does not respond promptly to this line of treatment that you will have to call a surgeon. Forget all about it as far as he is concerned. In other words, make all the observations possible, but no suggestions. I used to use ice-bags, but if you put an ice-bag over a patient's heart he wants to know what it is there for. Another thing is to study the pulse-rate. Tachycardia alone, like a subnormal temperature, is of no value at all unless it can be intelligently associated with other symptoms. I have been paying special attention to the pulse-rate recently, and doing this under induced sleep with bromids or cocaine, so as to make it possible for a nurse to enter the room and take the pulse-rate while the patient is sleeping soundly. The same thing is true in the use of your thyroid extract. If the pulse beats steady right through sleep, you can diagnose that case as hyperthyroidism due to toxic conditions, and you recognize it at a time when the surgeon can handle it most successfully.

DR. H. O. PANTZER, Indianapolis: It was my privilege to present the subject of exophthalmic goiter before this body in the late '80's, and it was a matter of greatest joy and gratification to hear the persons who have been presenting papers and discussing the subject on this occasion, as evincing the wonderful advance in our knowledge. I wish to emphasize one feature that bears closely on the remarks of Dr. Kimberlin. A toxemia of any sort does give rise to a fluid in the glandular organs, and it is variable in different individuals which glandular organs will become affected thereby, but we have that as an element to recognize. I know of a case where after an abdominal operation an acute tonsillitis gave rise to a most emphatic hyperthyroidism. Now if we associate with the general toxemia that comes from tonsillitis, from chronic stasis, from caries of the teeth—if we recognize there is a relation between the thyroid itself and this toxemia, then in our treatment we must be alert for elimination. Why is bed rest good? Nature does all her housecleaning then—when the patient can have sleep and rest. And I wish to say in support of what Dr. Kim-

berlin has said in regard to soporific remedies, that they help these cases to enforce rest, and if we will add to that the effects of elimination, it is simply surprising to what an extent many of these cases will get well. But look for the cause of your toxemia and eradicate that.

DR. L. F. SCHMAUSS, Alexandria: There are two or three points to which I would like to allude. One is in regard to the steps that should be taken in a case of tracheotomy which has to be performed. After several experiences in tracheotomy, or sewing up the wounds of the trachea, I find that unless you are careful in your technic you will get a most beautiful case of emphysema. In closing the trachea make the wound as air-tight as you can.

In regard to the recurrent laryngeal nerve, it undoubtedly is frequently injured or severed, and it behooves us to avoid or prevent this calamity; but we are not apt to be overcautious and in that manner injure the nerve, which perhaps otherwise would not be injured. I think the principal thing to do in these cases is to make a free incision. There is nothing worse than to try to remove a thyroid gland through an incision which is insufficient.

In regard to a local anesthetic, the first thyroidectomy I saw under a local anesthetic was in a foreign clinic, and the result of the anesthesia was such that I would not want to be operated on myself under a local anesthetic; but the reason for the pain and suffering of the patient was from the fact that the technic was not to my mind as it should be. They simply infiltrated the skin and subcutaneous tissue. Others tell you to infiltrate each nerve. That is easier said than done; that requires a knowledge of anatomy which the surgeon perhaps does not possess. But you can go ahead and infiltrate around the tumor, and this can be done without any particular danger except that of injecting an anesthetic fluid into a large blood-vessel. If the tumor is completely surrounded by the anesthetic fluid, there is practically no suffering. All this talk about it being painless and pleasant—there is nothing to it. You do suffer from that cutting and sawing. But in doing an operation, whether thyroidectomy or herniotomy or whatever it may be, it can be done more easily if we simply infiltrate the skin and the tissue as far as the operation will have to go. Do not infiltrate it step by step. That is not satisfactory unless we isolate the nerve and inject over the nerve.

DR. R. B. WETHERILL (closing): It seems to me, in summing up the question, it amounts to this: That as regards the diseases of the thyroid gland and the physiology of the gland, we are only in possession of part of the truth, and it is a very small part from the simple fact that a greater proportion of these cases of hyperplastic

goiter are not accompanied with symptoms of hyperthyroidism. We know that in 100 cases there are about eighty-five where hyperplasia will exist; about fifteen show no symptoms of hyperplasia, yet have marked hyperthyroidism.

Again, as far as the cause of goiter is concerned, we know that it is due to thyroid secretions, a hyperactive gland, and the obstruction of increasing secretions; but we also know that it is not the whole truth, because, as has been shown here, we find there are cases in which the whole gland has been removed and still we have a condition of hyperthyroidism. Another factor is that in certain cases, those cases where thyroid extract has been injected in large quantities, we find conditions which simulate hyperthyroidism, but are not exactly identical. I think the secret of the whole question is the relationship which exists between the thyroid and the other ductless glands. Exactly what that relationship is we do not know, but there is some very intimate relationship, and I think the future of the question will depend on our increased knowledge of the physiology of the interrelationship existing between the thyroid and the other ductless glands.

DR. G. K. THROCKMORTON (closing): In regard to the matter of ligation, some have rather discredited ligation as not producing the benefits claimed for it. I hardly think that should be true, because we have statistics, especially from the Mayo clinic, that show a very marked benefit derived from ligation of the superior thyroid arteries, and the patients gain—I think Dr. Mayo claims they gain an average of 22 pounds in from four to six months, which would show that there must be quite a great advantage in the procedure.

DR. H. H. MARTIN (closing): Owing to the lateness of the hour, there is only one point I will discuss—perhaps two. First, regarding the etiology of the different manifestations as we find them. I believe more and more that the symptoms of thyrotoxicosis are due to a definite etiologic condition of the gland itself. I believe it is possible in nearly 90 per cent. of cases to associate with a definite etiology of the gland a definite train of symptoms. Taking the thyroid gland that develops in the female at adolescence, where that gland does not recede but continues over a period of years as a small thyroid, in future years when the woman develops nephritis of arteriosclerosis, a majority of these cases die early. I think it is that class of cases we must recognize early, simply because we are dealing with the thyroid gland.

As to the best line of treatment—that is, the best line of treatment that we know of—if we knew what was producing the etiologic change taking place in that gland, then perhaps we would not be operating.

As to a local anesthetic, at the clinics in Germany and Switzerland, and two years ago at the Kocher clinic, I was amazed to see them bring in one patient after another, operating under a local anesthetic combined with morphin or scopolamin; but the majority were brought in in a comatose condition, so much so that in a great many cases when they tried to locate the recurrent laryngeal nerve they would have to poke the patients to get them to pay attention to questions. I saw a number of cases where artificial respiration had to be resorted to in order to keep them from dying. I saw the same thing in the Freiburg clinics, in the so-called “twilight sleep” for the purpose of obstetrics. But of course they say nothing about that in their statistical reports.

IF anyone doubts the power and influence exerted by the proprietary medicine interests in controlling legislation he ought to have his eyes opened when he considers that the provision for a war tax on proprietary medicines was dropped like a red hot iron when our congressmen at Washington began to hear from the rich and powerful proprietary medicine manufacturers. The specious plea was made that it was not right to tax “the poor man’s medicine”; and we regret that there were not sufficient congressmen with an appreciation of the facts to put forth the perfectly correct argument that proprietary medicines are the poor man’s poison, and, like liquor, are deserving of taxation and should be a legitimate source of revenue for the government. The United States Government, many health boards of states and cities, the Council on Pharmacy and Chemistry of the American Medical Association and some lay periodicals have published reports concerning a very large number of proprietary medicines in which proof is produced to show that practically all proprietary medicines are cruel frauds, and that the manufacturers of the same are victimizing the ignorant and the poor through the sale of such vile nostrums. Yet with such evidence before our congressmen, they bow meekly to the all-powerful proprietary medicine interests and refuse to impose a tax which would come out of the rich manufacturers and not the poor man whom they pretend to befriend. Certainly, the condition is one that offers food for reflection. Incidentally, *Collier’s Weekly*, *The Ladies’ Home Journal* and other lay periodicals with large circulations that valiantly have been fighting the patent medicine interests can find ample reason for renewing their attacks on a bunch of grafters that are entrenched so thoroughly that Congress bows deferentially to them.

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EDITORIALS

**WHY PROTECT THE INCOMPETENT
AND THE KNAVE IN THE MEDICAL
PROFESSION?**

Once upon a time—not so many years ago—there lived a maiden who, at about the twentieth year of her life, took unto herself a husband, and, strange to relate, about six weeks thereafter she missed her regular monthly flow, which up to that time had been normal as to time and duration. Becoming rather apprehensive as to the cause, she visited a physician, who, after due and proper examination, pronounced her pregnant, which information was not the thing she wished to hear. She was young, enjoyed having a good time—especially going to the picture shows and dances. Her old schoolgirl friend, married six months before, had succeeded in escaping this, the greatest responsibility of married life, and was, if anything, more free and more independent than before marriage. So she appealed to her family doctor for relief by abortive measures. The dangers of such a procedure were pointed out to her. She was told that such procedure not only might render her an invalid for the rest of her life, but that there was a possibility of it taking her life. She was told of the awful sin of destroying human life, especially one of her own blood. The picture in all of its horrors was painted most graphically and held for her inspection. All to no avail. She insisted that something must be done. In her desperation she took, one evening, an ounce and a half of a very strong medicine recommended by a lady friend as being sure to accomplish the desired results. Shortly after swallowing the contents of the vial she lapsed into unconsciousness. A physician was called, who, after due and proper examination, diagnosed, not pregnancy, but an enlargement of the ovaries and informed the lady and her family that an operation was not only advisable but necessary to save her life. The day of the operation was appointed and the arrangements made. Before taking this vital step she desired to consult once more her old family physician,

who, upon learning of the contemplated operation, not only forbade it, but threatened if necessary to invoke the law for its prevention. In the course of events she was delivered of a beautiful, vigorous, healthy girl. She still has her ovaries, and she has a child that is worth more to her than riches. She is now resting snugly in the bosom of the Christian Science faith. Can you imagine the mental process necessary for her to decide upon this very important step?

A Pole, forty-five years old, living in the same city and in the same block at the time of the contemplated operation upon the above described lady, was lying sick in bed, and had been for two weeks. A physician was called and he found that the man had a little fever, bad tongue, skin rather pasty-looking, tenderness over the right side on pressure and that a specimen of urine showed blood, pus, casts and albumen. Upon being told the nature of his trouble a smile lit up the man's heretofore troubled countenance. When asked for the cause he told how his former physician had diagnosed his condition as being due to appendicitis, and had insisted upon an immediate operation as being necessary to save his life so much needed and so necessary to his wife and children.

A lady near 45; menstruations irregular for several years; for the past several months they have failed entirely. About six months ago a tumor in the lower abdomen was first detected, which has grown steadily and rather rapidly until the whole abdominal cavity is filled. A physician diagnosed fibroid tumor, and insisted that an operation was necessary to save her life. The day is set and the arrangements made for this life-saving procedure. In the meantime nature decides to terminate the condition present, and the tumor is passed, which, upon due and proper examination, is discovered to be a beautiful, healthy and vigorous child.

A lady thirty-four years old, sick for two days, taken with severe chill, followed with fever, pain and stiffness in all the joints, throat very sore, pain in the right side just below the margin of the short rib. A doctor was called, and found her suffering with tonsillitis and an infection of the pleura involving a portion of the diaphragmatic pleura on the right side. The patient had been nursing for some six weeks past her twelve year old son who was afflicted with multiple furuncle, for which a physician had given some nine injections in the arm for their control and cure. The source of the infection in the mother's throat and pleura was suspected as originating with the boy. In a few days the physician who,

having treated the boy, was in charge of the mother, diagnosed the cause of the pain in the right side of the mother as being due to abscesses on the liver or gall-bladder, and recommended an immediate operation as being necessary to save her life. The patient by this time was so much improved that she was calling at the physician's office almost daily—a distance of three miles from her home. Upon being informed of the grave and immediate danger of one or more of the abscesses breaking, thus causing a general infection which would take her life, she most graciously submitted. After being on the operating table for two and one-half hours, no abscess was found, notwithstanding the physician's most careful and diligent search for same. In two and one-half days she was able to recognize her husband. She undoubtedly will be able to leave the hospital in due time. She may suffer no great inconvenience from this experience, but how about the mental attitude of the husband and father? If the time should ever come when an operation on himself or another member of the family is really essential, will he readily consent, or will the memory of his former experience so bias his judgment that a life is jeopardized, if not lost?

Who is responsible for this state of affairs? There can be but one answer to this very important question: First, the medical profession; second, the laity. The medical profession must bear the greater responsibility because of its attitude toward itself and toward the public. It makes no discrimination between the competent and the incompetent member. It makes no discrimination between the honest and the dishonest member. If a person has received the degree of Doctor of Medicine, honestly or dishonestly, he is accepted as a brother, and all alike receive the same consideration. The incompetent's shortcomings are covered up and protected because he is a brother practitioner, and to expose him is but to cast a reflection on the whole profession. So much has this been the case that a consultation of doctors many times is looked upon by the laity as a mere farce. Instead of eliminating the incompetent, or forcing him into a class by himself, the profession's attitude has always been to bring the whole to his level.

The profession criticises the public for taking patent medicine and treating with quacks when many of its own members are quacks in every essential except the one of publicly advertising themselves in the public press. Many times their methods would cause the ordinary quack to blush

with envy. And still we expect a careful discrimination on the part of the public when we make none ourselves.

It often is difficult for us of the profession to determine what is due to incompetency and what is due to dishonesty. Was the man honest when he told the lady that her trouble was due to enlarged ovaries and not to pregnancy, or was it due to incompetency? Was the man honest when he diagnosed pregnancy at the ninth month as a fibroid of the uterus, or was it incompetency? Was it honesty that prompted the diagnosis of appendicitis in the nephritic man? Was it honesty that prompted the diagnosis of abscess of the liver, or was it the desire for an operative fee? Was the man honest when he criticised the work of another physician and demanded an operation for the removal of an ordinary callous following fracture, or was it a combination of incompetency and dishonesty?

Why should we criticise the public in any way when we recognize the above combination and call him "brother"? In fact, wouldn't the people be better off in the folds of the Christian Science faith rather than left to the mercy of such as he? Why should the laity be criticised for endorsing one already endorsed and stamped as a brother practitioner? Is it any wonder that he and his like always enjoy a lucrative practice when we consider that every case carries a sure promise? Why shouldn't the laity choose the man that tells them the things they wish to hear, whether it be the truth or not?

If the profession chooses to stigmatize itself with such as he, then it should cease to offer criticism to the public willing to pay its money to the one offering the best inducement. From the public standpoint we say that it is too easy; that it should choose its physician not from personal appearances, not from boastful talk and false promises, not because he is a genial fellow with the handshake of a politician, but rather choose the man with the proper training and education; the one that is alive to and abreast with the progress of the day. Dr. W. A. Evans of Chicago says that the doctor who attends medical societies and enters into the workings of the societies, the one that writes and reads papers before his local and other societies, the man who has time and inclination to attend clinics and post-graduate courses, the man who buys medical books and medical journals and reads them, is the one the laity should choose as their physician. If the laity would but do this, their judgment would not, as a rule, lead them far astray.

What is to be done? Nothing, I suppose. Any move we might make might cast a reflection on the rest of the profession. So, for fear of publicity, in the airing of a few professional skeletons, are we going to sit tight and continue to hoodwink the public? With a profession so thoroughly organized, with its county societies, its district societies, its state societies and national society, together with the numerous other medical and surgical societies, the medical profession of America is absolutely responsible for the action and conduct of its members. In the legal profession, if one of its members so acts—so conducts himself that it brings discredit on the profession as a whole, he is denied the privilege of practicing his profession. By so doing the legal profession has always succeeded in maintaining a reasonably high standard. Why should not the medical profession follow the example.

H. H. MARTIN.

THE NECESSITY FOR A NEW HEALTH LAW

The care of the public health is the first duty of the statesman.—Disraeli.

The health department of a state is of higher importance than the financial department.—Vaughn.

Improve the public health, and crime, poverty, insanity and general delinquency will decrease.—Stermberg.

The present health law is out of date, it is sadly unscientific and unequal to the work of practically applying modern disease prevention methods. It therefore fails to produce the best results and the money spent is largely wasted. It is like an old, wheezy, back-number locomotive, which can run a little, pull a light load, and land nowhere. Think of a railroad company trying to do business in this age with such a machine.

The present health law for its execution employs doctors and others, for such time as they choose to give from their practice, and, of course, they choose to give very little time. No man can serve two masters, yet the present health law attempts to accomplish this impossibility. The "practitioner-health-officer," being in the practice of medicine, is in competition with his brother physicians, and, of course, cannot secure their cooperation. Without this cooperation, only partial success in disease prevention work, is possible. The "practitioner-health-officer" sometimes finds his own patrons are violating health laws, and, for fear of loss of patronage, he ignores the violation. Epidemics with loss of life have been traced to this evil.

Four fatal defects exist in the present health law:

1. Health officers are doctors giving what time they choose to public health work.

2. Present health officers are practicing doctors in competition with their brother doctors, and, therefore, cannot secure their cooperation. Without this cooperation present health officers are only partially successful.

3. "Practitioner-health-officers," with exceptions, are uninformed and untrained in disease prevention work. They are not hygienists, their education and training is in the line of the pound of cure and not in the line of the ounce of prevention. Hence they are not efficient and economical to the state.

4. Practitioner-health-officers not infrequently find their own patrons violating the health law and self interest prevents them from enforcing the health law, and the public suffers.

Other defects exist in the present health law, but they are only obstructive to its enforcement, not fatal. For instance, the law does not clearly and fully define health officers' duties and powers; it does not provide adequate pay; it does not provide money for public health work; it does not provide a proper penalty for failure or refusal to fulfill duties.

Failure and expense will continue if the legislature does not provide a new machine. The old one has served its day. It is uneconomical.

A new law, up to date and scientific, would provide trained health officers who give their entire time to keeping away disease and improving the public health, and must not practice medicine. Such officers should be appointed by local authorities, from an eligible list on which they have obtained recognition through physical and mental examination by the State Board of Health. Each county should appoint its own all-time county health commissioner; his salary should be a living one graded by the number of people he serves; his duties and powers should be clearly defined; he should keep full and accurate records of his work; he should be a deputy to the State Board of Health and be subject to dismissal for such reasons as the law may set forth. He should be held responsible for the public health within his jurisdiction.

A modern health law, as above outlined, would not create a new office, but would make an old office up to date and efficient. It would abolish all town health officers, and all city officers and boards of health except in large cities, say cities of 10,000 and over. Officers for small cities and

towns would be unnecessary under the new system, and their abolition would be a saving of money with increased efficiency.

A modern health law would not be an expense, but a true investment, bringing splendid returns in freedom from epidemics, in increased health with its increase of wealth and happiness.

Ill health and disease are largely preventable, and under a good health law they would be largely prevented. Preventable disease costs Indiana \$10,000,000 annually. We should save this. Let us then have a proper health machine for disease prevention and reap the good harvest.

A marked decrease in crime, insanity and poverty would attend the enactment and enforcement of a modern health law. This is true, because said law would reduce ill health and disease which are causative of most crime, insanity and poverty. These social ills are a terrible burden for society to carry. Any reduction of them would constitute an economy and a state betterment. The value would be very great.

The future belongs to that nation which has the most health and strength, not to the one which leads in sickness and weakness. Let us have all else but health and we fail. Hygiene can do more to advance the wealth and happiness of mankind than any other science.

Health, with its bounteous returns of wealth, strength and happiness, is purchasable. A state may have all the health it cares to buy.

Poverty, crime, insanity and feeble-mindedness are born of sickness. Cut down sickness and these blights, with their awful burden, will largely disappear. No wonder the practical Disraeli said: "The care of the public health is the first duty of the statesman." Now, where is the statesman?

Mr. Lapp of the Legislative Reference Bureau is writing a bill for a new health law containing the above points. Governor Ralston will doubtless recommend it. Mr. Lapp will advocate it. Everyone who believes in the conservation of health should support the bill.

J. N. HURTY.

INDIANA UNIVERSITY TRAINING SCHOOL FOR NURSES

The Training School for Nurses in connection with the Robert W. Long Hospital of Indiana University has been established to give instruction to women who desire to become trained nurses, and to offer them such advantages as a university alone can offer in the way of educa-

tional facilities and in allowing university credits for the work done by them.

The Training School is closely associated in its work with Indiana University School of Medicine whose dean is the superior officer of the Training School. The course will cover a period of three years, of which the first six months will be a preliminary or probationary term. At the end of the six months, those probationers whose work thus far has shown a good record will be required to pass satisfactory examinations in their past work before they will be accepted as pupils in the Training School. One of the chief objects of this probationary work is to enable the faculty of the Training School to obtain a general idea of the qualifications of the young women as nurses.

A suitable time allowance will be made to students who can show that they have taken some preliminary work covering the subjects most necessary to a nurse in addition to their high-school diploma. These subjects would include domestic science, biology, anatomy, physiology, bacteriology, sociology, some or all of which would be of great assistance in the study of nursing.

We hope some day to make a prenursing course obligatory, just as students of medicine have their premedical course. This will greatly relieve the congestion of the combined theoretical and practical work of those first few months of training, when the subjects must be taught which are the foundation of a nurses' course.

When nursing is more generally recognized as a desirable vocation for young women, and when the subject has been given its proper place in vocational schools and departments of universities, the students in the high schools will consider the necessity of preparing themselves for entering upon this work. This they will do by picking out those elective subjects of use to us or by deciding to take a preliminary prenursing course in some university having such work. It has remained for Indiana University to lead the way by recognizing the work done by the students of the Training School for Nurses as equivalent to a definite number of university credits. Though training schools for nurses before this have recognized the work of universities by making time allowance to their students, this is the first time, I believe, that a university is recognizing our work in the same way and has arranged for a combined course, making a time allowance of one year to the students taking this special course.

A student who has upon the records of Indiana University three years' work, or 138 hours of

credit in the College of Liberal Arts, and has done at least one continuous year's work in residence as a student in the College of Liberal Arts of Indiana University, provided that the student has met all the requirements of the College of Liberal Arts and of some one department as to major and minor subjects, may receive the degree of Bachelor of Arts in addition to the diploma of graduate nurse, upon the completion of the two years and four months' course in the Indiana University Training School for Nurses in Indianapolis. These same students will be allowed eight months' credit by the Training School for their three years in the University.

The raising of our standards for admission to the Training School for Nurses is the natural result of the many and varied demands made upon our graduates to-day with the growth of public welfare work, and the increase in special nursing work of many kinds.

The nurse no longer represents the relief of the sick alone; she preaches prevention, educates the public and thereby raises the social standing of those she comes in contact with. In order to do all this she must be a well-educated woman of the highest ideals, and with the best training our schools can give her she should become the good nurse, the ethical worker, and the helpful woman we wish her to be.

It seems unreasonable to suppose that in this age when all professions, callings and occupations are raising their standards, nursing, the only profession exclusively belonging to women, should be expected to stand still and not keep up with modern progress.

The number of applicants for admission to the training schools that have raised their standards has increased, and if a school complains of lack of applicants we may safely conclude that the standards of that school are too low for the present-day candidate, and that the remedy lies in raising those standards.

I should like to say a few words about the course we are starting. We have a great work ahead and we hope that we are on the right road to carry it through successfully. I have a class of eight students and will admit eight more in March. These sixteen pupils will be the graduates of our first class in 1917. These students have daily classes in practical nursing in the demonstration room and in the wards. They have had a course in microscopic and gross anatomy, and in physiology with demonstrations at the Medical School under the direction of the University. They are having a course in bacteriology in the laboratories of the Medical School

under the direction of the head of that department. Here the students are given the opportunity to make the simpler tests and to watch their results. The use of the well-equipped laboratories of the Medical School is going to be of the greatest value to the nurses, as no course is complete without being accompanied by practical demonstrations.

In conclusion I want to ask for a more general public understanding of what nursing stands for and what we are trying to do to raise the standards of our profession through better training, through state and national nursing organizations, and through compulsory state registration.

ALICE FITZGERALD,
Director of the Training School.

EDITORIAL NOTES

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

SAYS Dr. J. N. Hurty, whose specialty is public health: "We need more legislation to help babies and less to help hogs." What can you expect, Doc., when there are so many hogs in the average legislature?—*Puck*, Nov. 7, 1914.

THE Society for the Prevention of Cruelty to Animals, which has been throwing fits of protest against the vivisection of rabbits in the interest of science, appears to be perfectly reconciled to the shipment of many thousands of fine horses to the shambles of the European battlefields.—*The Fort Wayne News*.

READERS OF THE JOURNAL, when scanning the advertising, should notice the announcements of the various pathological laboratories carried in each issue. The physician knows that modern diagnosis and treatment of disease cannot be done without the assistance of the clinical laboratory. All of the laboratories advertised in THE JOURNAL are prepared to examine and report on pathologic tissues and specimens of every kind sent for examination, as they also are prepared to make vaccines and serums.

It is a waste of time and energy to attempt to keep up a directory of county and district medical societies unless the officers of these societies assist us by notifying us as to changes in the names of officers and dates of meetings. So far

as the district societies are concerned, we seldom receive an advance notice as to any meeting, and what information is obtained usually comes through press clippings or other indirect ways. THE JOURNAL is a medium for announcements for any and all affiliated societies of the Indiana State Medical Association, but it is the duty of the officers to furnish the official information.

ACCORDING to the *Lebanon Daily Reporter*, a chiropractor has been found guilty by jury of practicing medicine without a license and a fine of \$25 has been assessed. The State Board of Medical Registration and Examination was back of the prosecution, and the National Chiropractor Association assisted in the defense. Now the question is, will the results amount to anything, or will the chiropractor hang his shingle somewhere else in Indiana and continue in business like all the other chiropractors who are practicing in Indiana without fear of molestation?

ACCORDING to the existing rule, every county medical society in Indiana will hold an election at some meeting during the month of December. In this connection we desire to remind the members, as we often have done before, that to a very large extent the success of any organization depends on the energy, enterprise and tactfulness of the secretary. The position of secretary is not one of honor if the duties of office are filled satisfactorily. It means work, and at best is a rather thankless job. However, someone must do the work and whoever is selected should be especially qualified for the position and should have the earnest cooperation and endorsement of every member of the society.

JUST at the present time doctors all over the country are being bombarded with literature concerning the advisability of buying a policy in an accident and health insurance company which offers rather tempting inducements. We may have something further to say on this subject a little later, but for the present desire to suggest to our readers the advisability of thoroughly investigating any propositions which require the payment of money. Doctors are known to be "easy marks" and are so frequently "buncoed" that it is a standing joke among those who make a living by their wits that if they have a gold brick to sell their chances are best with the medical profession. It is all right to carry health and accident insurance, but why take up with unknown concerns having unknown assets?

PHYSICIANS outside of Indiana are making inquiry concerning the American Bureau of Medical Research reported as having offices in the Newton Claypool Building, Indianapolis. According to the report, Mr. Clarence E. Beck is collecting money which is supposed to be applied on the subscription of certain medical periodicals, and for which other considerations are promised. Letters addressed to him, or to the American Bureau of Medical Research which he reported himself as representing, have been returned unclaimed. Medical men will serve their best interests if they determine the standing of any concern before giving up good money, and it is never a good policy to pay money to agents. An agent who collects money in advance may have a legitimate reason for doing so, and may be perfectly trustworthy, but for one such agent there are ten that are working a "bunco" game.

SCOPOLAMIN and morphin in combination possesses virtue as an analgesic, but a word of caution as to its use in childbirth is indicated if we are to prevent needless loss of infantile life. "Blue babies" are sufficiently plentiful without increasing the number, and the obstetrician who thinks of employing the "twilight sleep" should understand thoroughly the use of the powerful drugs he contemplates employing and be very guarded in their use. While we have nothing but condemnation for the undue publicity given the Freiburg method, it is quite possible that the method as carried out at Freiburg is worthy of consideration, though it is a well-known fact that the use of scopolamin and morphin in childbirth has been tried repeatedly in this country, but with results that did not justify its use as a regular procedure. If there is anything wrong with our method, then by all means let us test to the fullest extent the Freiburg method.

COMMON SENSE SPREADS.—Another powerful endorsement of the efficacy of anti-typhoid vaccine is contained in a report to the Italian Minister of Marine by Professor Lustig of Florence on the effect of the introduction of this vaccination into the Italian navy. Though it is only optional, it has produced such a marked reduction of the disease among those vaccinated that Professor Lustig urges that it be made compulsory in the army and navy, as it is in Japan, the United States and some other countries.—*New York World*.

It is an old adage which says, "An ounce of prevention is worth a pound of cure," but it has taken supposedly enlightened nations long and

weary years to realize the truth. Ultimately—half a century in the ultimate—the truth of it may extend even to the minds of antivivisectionists. The fact that antityphoid vaccine serves as a means of saving human life is at present nothing to them compared with the greater (and deplorable) fact that animal life, the life of rabbits and guinea-pigs was sacrificed to produce it.—*Puck*.

THE election is over, but we cannot refrain from commenting upon the inconsistency of political parties in nominating pseudomedical men or laymen for the office of coroner. If there is any one official position that requires the judgment of a well-educated medical man, thoroughly versed in all of the branches of medical science, it is that of coroner. It was, therefore, amusing to members of the medical profession to read the political announcements of some of the men who were running in the last campaign for coroner. For instance, Dr. Tom Bell, Republican candidate for coroner of Blackford County, announced that for some time he was in the jewelry business, at the same time practicing optometry. Later he gave up the jewelry business and devoted all his time to optometry. A while later he became a chiropractor, and with the assistance of the two sciences, which he boasts of having mastered, he claims to have been very successful, and with such ability he is announced as being an ideal man for coroner.

MUCH is to be learned concerning the value of radium in the treatment of various disease conditions, and yet reports from trustworthy sources are appearing in sufficient number to justify the opinion that in radium we have a most valuable therapeutic agent providing it is used with due intelligence. A great deal of study and experience will be required in order to give radium its true place as a remedial measure, and the average medical man will do well to take advice from those who are giving the matter special attention rather than rush blindly into the use of a remedy that has as great potentialities for harm as for good. As one writer has well said: "Many factors enter into the problem of the successful use of radium. The technic of filtration, the length of time of application, the amount of salt necessary to be used as well as its form and shape, the location and position, the susceptibility of the tissue involved, its pathology, the various degrees of resistance of the different normal and abnormal cells as well as other chemical, physiological and biological facts must be understood before

the therapeutic value of this element can be determined. Until experience has given us more knowledge, reports of the results of treatment must continue to be unsatisfactory in many cases—not because radium is not capable of doing the things we expect, but because as yet we do not know how to make proper use of it."

We suggest that each one of the readers of THE JOURNAL avail himself of the services of the Radium Chemical Company of Pittsburgh in securing literature and clinical records as also in securing expert advice on radium therapy.

THE Ohio State University, in creating a college of medicine, as authorized by legislative enactment, has proceeded to establish a homeopathic medical college, without adequate equipment, and with entrance requirements that are far below those of reputable medical schools. It is announced that only a high school education is to be required and that students enrolling in the homeopathic college are to be charged only \$125. In the regular medical school, controlled by the same board of trustees, the entrance requirements are two years of college work, and the entrance fees are \$150. It is not quite clear why such a distinction should be made, and it does not speak well for the trustees of the university to place a premium on incompetency. It is but a step farther to have a department devoted to the teaching of any of the pseudo-medical cults with still less exactions. Another asinine act was the creation of a school of optometry which is given undue importance by being attached to the university. In all probability this is but an entering wedge to what many of the optometrists have claimed they are prepared to do, namely, treat diseases of the eye without the formality of having a general medical education. As *The Journal of the A. M. A.* well remarks: "It is a question whether the same influences which seem to have prevailed with the trustees of the Ohio State University will also succeed in breaking down the laws which thus far have provided the same educational qualifications for all who are to practice the healing art. If they do succeed, then the only barrier which stands between the sick and suffering people of that state and the hordes of illiterate and incompetent would-be-practitioners will be thrown down. We are not willing to believe that the people of Ohio will ever permit such a misfortune to happen. Surely, they are as much entitled to protection against uneducated physicians as are those of any other state."

IN a recent issue of *The Journal of the A. M. A.* attention was called to the enlightened action on the part of an advertising manager for a cement company in demanding that advertisements for his product should not be lined up with advertisements of fraudulent wares. He holds, in common with most up-to-date advertising men, that every dishonest advertisement tends to undermine the confidence of the public and thus hurt every decent advertiser. In its issue for September 26 *The Journal of the A. M. A.* calls attention editorially to a good illustration of the principle involved in this action which appeared in a recent issue of a Chicago afternoon paper. On one page of this paper there was a fairly large advertisement of Marshall Field & Company. The advertising copy was in good taste; the wording was conservative, and the general effect of the advertisement was convincing. The products advertised were women's garments. On the same page of the paper, and in close proximity to the department store's "copy" was an advertisement of Lydia Pinkham's fraudulent nostrum (alcohol, 18 per cent.) urging women who have "that weak, languid, always tired feeling," to purchase this "great blessing." On the other side of the store's advertisement "Beecham's Pills" blared forth in heavy black-faced type their lying message to the world. Just below was a paragraph entitled "Valuable Discovery in Complexion Beautifier." This was in news style and had nothing to indicate that it was an advertisement. It told women of the alleged virtues for the complexion of "mercolized wax," a particularly vicious caustic poison. It is interesting to speculate on the damage, from an advertiser's point of view, done to the Marshall Field & Company's advertisement by lining it up in close proximity to three evident frauds. It is still more interesting to think what would happen if the decent advertisers in the newspaper referred to were to send to their advertising agencies the same message that was sent by the cement company's advertising manager: "Will you please say to all newspapers desiring to carry our advertising that we decidedly object to being placed in close company with noisome patent-medicine ads. and other fakes or near-fakes . . . ?"

THE *Gary Post*, under date of October 26, contains what presumably is the advertising of some chiropractor in which he says that the death of two children at Fort Wayne as a result of a knife operation for the removal of tonsils and adenoids is proof that chiropractic is deserving of a fair

trial. Isn't that enough to make an Egyptian mummy sit up and take notice? We have been noticing long articles in the daily newspapers by chiropractors and osteopaths in which these manipulators claim to effect cures in all manner of diseases—not omitting such diseases as diphtheria—so we are not surprised to hear that chiropractic is deserving of consideration for the relief of enlarged tonsils and adenoid tissue. On the heels of a fatality at the hands of an incompetent, and under circumstances that are not in keeping with operative work performed by any competent and experienced physician, it is quite possible that many people will be frightened at the thought of adopting surgery for the relief of many children that are suffering from obstructed breathing due to enlarged tonsils and an overabundance of adenoid tissue. The chiropractors, osteopaths, and others of their kind, quite naturally are taking advantage of the situation, and it is unfortunate that only time will demonstrate the fallacy of the reasoning that prompts anyone to believe in the efficacy of anything but surgical interference in a case of obstructive lesions that cry loudly for prompt and thorough eradication by operative means. But what is spent in printer's ink will probably bring about results for the chiropractors, and the public pays the tariff. There is room for a good deal of educational work that should be performed by our local medical societies, and as the constitution of every county medical society in Indiana provides for the appointment of a committee on publicity we earnestly urge that some of the fallacious teachings of the pseudomedical cults shall be offset by articles that have been prepared under the sanction of and approved by county medical societies and published in the daily newspapers. These articles should be devoid of personality, and, with a view to avoiding the charge that they have been written for personal gain, no individual names should be attached as authors and the articles should be published under the authority of the society. The American Medical Association has been doing a great work through its press bureau, but a still greater work can and should be performed by committees on publicity connected with county medical societies.

THE druggists are asking the members of the medical profession to assist them in securing much needed legislation to raise the standard of pharmacy. Incidentally, it is known that there is a movement on foot so to shape the legislation that it will prevent physicians from prescribing in any other way than by prescription. We

desire to remind the druggists that as long as they are antagonizing the medical profession it does not come with good grace for them to ask medical men to assist in securing legislation that will be of benefit to the druggist but a detriment to a majority of the medical men. With surprisingly few exceptions the druggists in every city, town and village are agents of the proprietary medicine manufacturers, and, furthermore, are guilty of counter prescribing whenever occasion offers. We recognize the legal right of the druggists to cater to the wants of the public, though we consider that it is questionable ethics to further the sale of remedies that every druggist knows to be frauds; and the matter of publicly proclaiming and even guaranteeing that these frauds possess virtue, as evidenced by the newspaper advertising of druggists, is not likely to be overlooked by the average doctor when he considers the advisability of giving encouragement and assistance to the druggist. Couple this with the counter prescribing so prevalent in every community and you have a bill of particulars as to why the medical profession is not more keenly in favor of helping the druggist. If we could be assured that the druggists really desire to raise the standard of pharmacy and do away with the proprietary medicine evil and counter prescribing, we would feel justified in giving them encouragement and assistance in their worthy efforts. As a matter of fact, every city, and even the smaller towns, can and should support a strictly high-grade prescription pharmacy. Such a pharmacy should have reason to boast of not only the quality of the goods and service rendered, but the ethics followed. Counter prescribing and the sale of proprietary remedies would have no place in such an institution. The enterprise would deserve and should have the confidence and patronage of physicians and public. Unfortunately, the average pharmacist, in a sense, always has antagonized the medical profession while bidding for the doctors' business, and gradually the drug store has drifted into a position where it represents a kind of department store where a little of everything in the line of sundries is carried, but which makes a special business of counter prescribing and promoting the sale of fraudulent proprietary remedies. The profession of pharmacy has deteriorated because of these commercial practices, and it is not the fault of the physician that such a state of affairs exists. By all means let us have some legislation that will elevate the standard of pharmacy, but when we have such legislation we should shape it so that the practice of

pharmacy will not be disgraced by the policy now in force in practically every drug store in the land.

THE following articles have been accepted for inclusion with "N. N. R." during the month of October:

Abbott Alkaloidal Co.: Strepto-Bacterin (Human): packages of six ampoules, each containing 100 million killed bacteria. Snee's Normal Horse Serum: vials containing 100 c.c.

H. M. Alexander and Co.: Typhoid Vaccine.

Greeley Laboratories, Inc.: Acne Vaccine: packages of six syringes, each containing 12 million bacteria. Colon Vaccine: packages of six syringes, each containing 1,000 million bacteria. Pyocyaneus Vaccine: packages of six syringes each containing 1,000 million bacteria. Gonococcus Vaccine: packages of six syringes, each containing 500 million bacteria. Penumococcus Vaccine: packages of six syringes, each containing 500 million bacteria. Staphylococcus Albus Vaccine: packages of six syringes, each containing 1,000 million bacteria. Staphylococcus Aureus Vaccine: packages of six syringes, each containing 1,000 million bacteria. Streptococcus Vaccine: packages of six syringes each containing 500 million bacteria. Typhoid Bacillus Vaccine: packages of six syringes, containing 1,000 million bacteria; packages of six syringes containing, respectively, 100, 200, 400, 600, 800 and 1,000 million bacteria.

Memorial Institute: Diphtheria Antitoxin, 10,000 units.

H. K. Mulford Co.: Friable Tablets of Emetine Hydrochloride. Pyocyano Bacterin: packages of four syringes containing 50, 100, 200 and 400 million killed bacteria.

Pasteur Institute of St. Louis: Antirabic Vaccine.

Schieffelin and Co.: Acne Vaccine: packages of four syringes containing respectively 5, 10, 20 and 40 million B. acne. Antimeningococcus Serum: 30 c.c. cylinder; 20 c.c. vial. Colon Vaccine: two vial packages containing 50, 100, 200 and 400 million killed bacteria. Gonococcus Vaccine: five syringes, containing, respectively, 50, 100, 200, 400 and 1,200 million killed bacteria. Scarlet Fever Treatment: packages of four vials, containing 50, 100, 200 and 400 million killed bacteria.

E. R. Squibb and Sons: Bacillus Coli Communis Vaccine, box of six ampoules containing 100, 100, 500, 500, 1,000 and 1,000 million killed bacilli, with a syringe. Pyocyaneus Vaccine, box of six ampoules containing 100, 100, 500, 500,

1,000 and 1,000 million killed bacilli, with a syringe. Staphylo-Acne Vaccine, box of six ampoules containing 100 million killed staphylococci and 20 million killed acne bacilli, 100 million killed staphylococci and 20 million killed acne bacilli, 500 million killed staphylococci and 50 million killed acne bacilli, 500 million killed staphylococci and 50 million killed acne bacilli, 1,000 million killed staphylococci and 100 million killed acne bacilli and 1,000 million killed staphylococci and 100 million killed acne bacilli, with a syringe. Streptococcus Vaccine, boxes of six ampoules containing 100, 100, 500, 500, 1,000, 1,000 million killed streptococci, with a syringe.

Standard Chemical Co.: Radium Bromide.

THERE is an old saying that "The laborer is worthy of his hire," and this is as true when applied to the services of the physician as to the services of those following other vocations. Not every medical man deserves what he sometimes charges and sometimes gets, and, on the other hand, many medical men fail to receive what they are entitled to for the services they have rendered. Unfortunately, there are incompetents and rascals in the medical profession just as there are incompetents and rascals among those following other professions or trades. However, on the whole, physicians are a hard working, conscientious, charitable class, who, for the actual time, effort and money expended in equipping themselves for their work and for the responsibility assumed in ministering to the sick and afflicted, are receiving far less returns than in justice seems merited. Now and then a doctor may receive what seems to be an exorbitant fee for some service that it has been possible to render only as a result of competency and experience obtained at large expense and through years of work; but one fee that is large is offset by many that are ridiculously small, and the rendering of other services which are purely charity. There is no other profession and there is no trade which works so persistently and so effectually to teach the people so to live that they will not need the services of those whose very existence depends on the misfortunes they are attempting to eradicate. In spite of this, the medical profession is obliged to contend with no small amount of criticism for even the conscientious and praiseworthy work that is done in disease prevention, and even the title to compensation for services rendered is oftentimes questioned. Not infrequently newspapers voice the sentiments or feelings of those who, from ignorance or malice,

are fighting the members of the medical profession individually and collectively, and it is refreshing to find any reference to the value of the work that is done by medical men and the justice of the rewards that are sometimes secured. The *Fort Wayne News* is one of the daily papers that not always has spoken kindly of the medical profession, and yet its very able and generally level-headed editor evidently has recognized the true facts when he gives credit to genius and hard work in the following abstract from an editorial entitled "What It Represents." Young Americans are admonished to differentiate between that recognition which comes to endeavor which is crude and that which is skilled. Concerning professional men, the editor then says:

"We sometimes hear the complaint that it is not fair that an eminent surgeon or a great lawyer should take as his fee for a few hours' attention a sum which a common laborer must strive for months to earn. Yet there is another side to that little matter, and that is found in the fact that the lawyer and the surgeon struggled for years to master their professions. The common laborer, when he began, received the same stipend that he receives to-day after years of application, yet it must be said that he is doing the identical work that he did then and is doing it no better. He is being paid what his product is worth on the markets of the world. But the successful doctor and the successful lawyer for years paid out money equipping themselves, and took none in. And then for other years they struggled along in hand-to-mouth existence while establishing themselves in their professions. They prepared themselves and now they take the rewards. The \$500 fee or the \$5,000 fee does not represent the actual time given by the authority in his profession to the case at hand. It represents the years of toil, struggle, discouragement, and sometimes actual privation. It is a fee that was being earned long before the case that warranted it was ever dreamed of. Indeed, the whole story constitutes one of the most valuable and impressive lessons of life—the lesson of the reward of that excellence which is attained through the marriage of genius and hard work."

DEATHS

LINDLEY RUDDICK, M.D., one of the oldest physicians of Seymour and a veteran of the civil war, was found dead in his bed October 20, the seventieth anniversary of his birth. Dr. Ruddick was born near Farmington in 1844, and was a graduate of the Medical College of Louisville, and has practiced medicine continuously at Seymour since his graduation with the exception of ten years which he spent at Reddington. He was a member of the Jackson County Medical Society and the Indiana State Medical Association.

CASSIUS E. VAN MATRE, M.D., died October 17 at his home in Newcastle after an illness of two months from a complication of diseases. Dr. Van Matre was born near Middletown, Ind., Nov. 13, 1868. His early boyhood was spent on the farm, where he attended the district school, later entered Wittenberg College, Springfield, and graduated from the Cincinnati Medical College in 1895. In April of the same year he began the practice of medicine at Newcastle where he continued until his death. Dr. Van Matre was held in high esteem among all who knew him, and was a member of the Henry County Medical Society, the Indiana State Medical Association, and the American Medical Association.

NEWS NOTES AND PERSONALS

INDIANAPOLIS

THE office of Dr. C. R. Strickland was recently robbed of about fifty dollars.

DR. CHAS. A. PFAFFLIN, who has been studying in Berlin, arrived home October 26.

DR. W. S. TOMLIN has returned from New York and Boston, where he spent several weeks.

DR. W. B. KITCHEN has moved his office from the Pennway Building to the Hume-Mansur.

DR. WALTER SHARPE has returned after a brief visit to his old home in the vicinity of Boston, Mass.

DR. J. D. GARRETT and family motored to his home in Ohio, spending a week with his father and mother.

THE Protestant Deaconess Hospital has been benefited to the extent of \$500 by the will of Levi Eilering.

DR. A. L. WILSON announces the removal of his office from 809 Odd Fellow Building to 211-12 Newton Claypool Building.

DR. J. A. McDONALD is taking postgraduate work at Johns Hopkins and will return to Indianapolis in December to resume his practice.

DR. H. R. MCKINSTRAY has moved his office from the Willoughby Building to 510 Hume-Mansur, occupying a suite with Dr. Freeland.

A WOMEN PHYSICIAN'S CLUB has been organized, the members comprising all the women physicians of the city. Dr. Hannah Graham was elected president.

DR. CHARLES JONES of Marion was seriously injured at a hotel in Indianapolis recently, by having his left wrist badly cut. It is expected that he will recover.

DR. CHARLES S. GOAR has settled with the Pittsburgh, Cincinnati and St. Louis Railway for \$8,000 for injuries received by him when struck by a train a year ago.

DR. F. C. DENNY, Indiana University, 1911, has returned from Chicago, where he has been doing postgraduate work in anesthesia, and will affiliate himself with the resident medical service of the Deaconess Hospital of Indianapolis.

THE County Council has agreed to make a tax levy of one cent on each one hundred dollars to build a tuberculosis hospital which will care for 134 patients. It is expected that at least \$27,000 a year will go into this fund, which later on will be used to maintain the hospital.

THE first Scientific Seminar of the Medical Faculty was held Friday evening, October 23, at the college building. Prof. Lindley, occupying the chair of psychology at the University, gave a talk on some of the newer phases of the development of psychologic research. At a future time he expects to discuss the relation of psychology to practical medicine.

DR. FRANKWOOD E. WILLIAMS, formerly resident physician at the Psychopathic Hospital, Ann Arbor, Mich., and first assistant physician at the Boston Psychopathic Hospital, has been appointed executive secretary of the Massachusetts Society for Mental Hygiene. An office has been opened at 313 Fort Building, 15 Ashburton Place, Boston. Dr. Williams was formerly a resident of Indianapolis.

RECENTLY at Indianapolis was formed a tri-state association of physicians, dentists and pharmacists of Indiana, Ohio and Kentucky. The following officers were elected: president, Dr. W. A. Method, Columbus; vice-president, Dr. W. J. Woodlin, Columbus; secretary, Dr. H. W. Armistead, Indianapolis; treasurer, Dr. A. L. Cabell, Terre Haute.

THE first Disease Prevention Day was celebrated in Indianapolis by the largest parade seen this year. Scores of floats showed the sanitary methods employed in different occupations in producing pure food. Probably fifty thousand people saw this parade, which was well handled by the National Guard and the Boy Scouts. Preparations are already being made to have a greater demonstration next year.

DR. TOM WILLIAMS of Washington, D. C., recently read a very valuable paper before the local medical society on the subject of traumatic neuroses. As many of the states are passing workmen's compensation laws, this subject will assume increased importance. The subject was intelligently discussed by Dr. Williams and the paper is well worthy of close study, not only by the neurologist but by the general practitioner.

THE CITY BOARD OF HEALTH has appointed Miss Carrie Paddock superintendent of public nursing, which is a new department recently inaugurated. Student nurses from the hospitals of the city will be employed to visit homes where children have been excluded from school on account of disease, so that the children can return to school promptly. Later plans will be outlined for social service and infant welfare work.

At the twelfth annual meeting of the Indiana State Nurses Association a plan was proposed whereby a state public health association will be formed to which physicians, nurses and laymen will be eligible to membership. The intention is that the association will secure cooperation in the various communities of the state between the members of the profession and citizens for the improvement of the public health. Such associations have been formed in other states. The following officers were elected: president, Ida J. McCaslin, Logansport, Delva Mills, Stanley; first vice-presidents, Bessie C. Graham, South Bend, and Elizabeth Hefner, Lafayette; second vice-presidents, Dora L. Burr, Terra Haute, and Mary A. Meyers, Indianapolis; secretaries, Ida M. Gaskill, Indianapolis, and Minnie Marples, Cambridge City; treasurers, Francis M. Ott, Morocco, and Ethel Chisholm, Terre Haute.

GENERAL

DR. O. E. McWILLIAMS of Anderson has been quite ill with lung fever.

DR. T. I. PADGETT of Jasonville has gone to Florida to spend the winter.

DR. GEORGE W. MILLER of East Chicago has been quite ill with typhoid fever.

DR. L. R. MILLER has been appointed on the Pension Examining Board at Winslow.

HENRY COUNTY is working for a new county hospital under the 1913 county hospital law.

DR. J. T. SULLIVAN, retired, of Summitville was married recently to Mrs. Rogerson of Marion.

DR. THOMAS J. CLUTTER, formerly of Atwood, has located at Mentone for the practice of medicine.

DR. J. W. GRAY of Bloomfield who has been ill for several weeks, is able to be at his office again.

DR. LEE F. HUNT and wife of Anderson have been in Texas on a combined business and pleasure trip.

DR. WILLIAM S. TOMLIN of Indianapolis has returned from a several weeks' visit in New York and Boston.

DR. C. C. RAYL of Monroe, who has been quite ill for several weeks with heart trouble, is improving.

DR. W. W. MUNSELL, formerly of Urbana, Ill., has located at Crawfordsville for the practice of medicine.

DR. VIRGIL GORDON of Blountsville was married on October 21 to Miss Josephine Miller of Indianapolis.

DR. O. O. MELTON of Hammond was operated at Augustana Hospital, Chicago, for appendicitis on October 21.

DR. AND MRS. J. S. ROBINSON of Winchester are the proud parents of an eight-pound girl, born October 8.

DR. JAMES G. MUMFORD, noted surgeon and writer, died October 18 at his home at Clifton Springs, N. Y.

DR. AND MRS. J. W. CLARK of Washington have returned from an extended visit with relatives in Portland, Ore.

DR. HARDIN S. DOME and family, formerly of Tell City, have moved to Sacramento, Cal., where they expect to make their future home.

DR. CHARLES LOOMIS, formerly of LaPorte, has formed a partnership with Dr. J. W. Dunfee of Etna Green and moved to that place.

DR. C. E. NETHERTON, a graduate of the Chicago College of Medicine and Surgery, has located at Francesville for the practice of medicine.

DR. T. J. SHACKLEFORD of Warsaw, who recently underwent an operation at the Presbyterian Hospital at Chicago is improving nicely.

DR. W. D. SIMMONS, formerly of Clear Creek, has gone to Florida and expects to engage in the practice of medicine at DeFuniack Springs, Fla.

DR. GEORGE F. BEASLEY of Lafayette was elected president of the American Association of Railway Surgeons at their recent meeting in Chicago.

DR. JOHN H. NILES, formerly of Dudleytown, has located at Seymour and will practice medicine in the offices occupied by the late Dr. H. R. Luckey.

DR. F. N. WILLIAMS of Tell City has been appointed secretary of the City Board of Health to succeed Dr. Walter J. Cluthe, who has resigned.

DR. WM. M. VEAZEY of Avilla suffered a fracture of the small bone in his right arm just above the wrist recently while attempting to crank his automobile.

DR. CHAS. M. BEALL of Clarksburg, who has been in an Indianapolis hospital several weeks where he underwent an operation, has returned to his home.

DR. GEORGE L. PERRY of Portland, who has been attending the clinics at New York City and at the Mayo Institute at Rochester, Minn., has returned home.

THE Epworth Hospital of South Bend has established a new baby department. The department is essentially for charity cases, but any child will be treated.

DR. M. H. KREBS of Huntington has returned from Indianapolis where he has been taking treatments for an injury received last summer. His condition is improved.

THE private library of the late Dr. J. R. Hinkle of Sullivan has been presented to the Carlisle Public Library. Dr. Hinkle was formerly a resident of Carlisle.

DR. AND MRS. J. L. DURHAM of near Graysville entertained the Sullivan County Medical Society October 7 in honor of Dr. Durham's seventieth birthday anniversary.

MRS. CHAS. S. BOND, wife of Dr. Chas. S. Bond of Richmond, died October 29 after an illness of several years caused by hardening of the arteries and resulting invasion of the kidneys.

DR. H. J. GRAHAM of Mishawaka was married October 8 to Mrs. Theresa Tromp Jernegan, formerly of Tucson, Ariz. They left immediately for an automobile trip through Canada.

DR. DANIEL T. MILLER, formerly of Terre Haute, has been appointed an additional instructor in the department of anatomy of the Indiana University. Aside from this, he will take post-graduate work.

DR. F. B. HUMPHREYS of Angola, who was detailed as one of the surgeons of the Indiana National Guard, attended the National Conference of Military Surgeons held in Cincinnati early in October.

THE sixteenth annual meeting of the Ohio Valley Medical Association was held at Evansville November 4 and 5, under the direction of Dr. A. D. Wilmoth, president, and Dr. Benj. L. W. Floyd, secretary.

THE ninety-second annual meeting of the Union District Medical Society was held at Richmond October 22. Dr. D. W. Stevenson of Richmond is president and Dr. W. A. Thompson of Liberty, secretary.

DR. JOSEPH RUBSAM, wife and son of Logansport have returned from Germany where they were sight-seeing when the war began. Dr. Rubsam served several weeks in a Red Cross hospital in that country.

DR. WILLIAM A. WEISER and wife of Indiana Harbor have gone to Bourbon, Ind., for an extended visit with their son and other relatives. Dr. Weiser and wife are both in very poor health and are hoping to regain strength by taking this rest.

DR. L. F. HULSMAN, who was formerly associated with the Knapp Sanitarium at Vincennes, but who for the past few years has been located at Boonville, Mo., has returned to Vincennes and opened offices where he will engage in treating diseases of the eye, ear, nose and throat.

THROUGH some misunderstanding the stereopticon slides which have been sent to doctors over the state for use in connection with conservation of vision lectures, have not been returned to the editor of THE JOURNAL. We shall appreciate it greatly if the doctor who used the slides last will return them promptly to the editorial office, 219 West Wayne Street, Fort Wayne.

DR. E. G. KYTE, graduate of the Indiana University School of Medicine, 1908, who served one year as intern at the Methodist Hospital in Indianapolis, one year house physician for Home Lawn Sanitarium at Martinsville, and a year in Chicago with the Department of Health, has located at Seymour with his father, Dr. Henry R. Kyte, for the general practice of medicine and surgery.

THE Eighth Indiana District Medical Society held their annual session at Muncie October 15. The program for the morning session was as follows: "Serodiagnosis of Pregnancy and Cancer by the Abderhalden Method," Dr. N. D. Goodhue, Dayton, Ohio; "Some Problems in Infant Feeding," Dr. J. H. Hess, Chicago; "Cardiac Lesions and Their Diagnosis," Dr. George Bond, Indianapolis; "The Diagnosis and Prognosis of Gastric Ulcer," Dr. Frank Smithies, Chicago. The afternoon meeting was public and the program consisted of a Symposium on Public Welfare by Dr. Alvin Light and Dr. Frank Garland, both of Dayton, Ohio.

VACCINATION against cholera is now compulsory throughout the Austro-Hungarian army, according to a dispatch sent to the *Frankfurter Zeitung* of October 11 by its special correspondent with the Austrian forces. The correspondent reports the receipt by the military authorities of 120,000 packages of serum prepared in the Bacteriological Institute of Vienna, since the beginning of the war. "The procedure of vaccination," he says, "is very simple. The soldiers step forward, rank by rank, with coat and shirt opened so as to lay bare their chests. A dab of tincture of iodine is given to the right breast, and then the injection of serum is made there. While this is taking place each man is

questioned about his personal history and condition and his answers are entered on the vaccination book. A physician then pastes a bit of adhesive plaster over the point where the injection has been made and the soldier steps aside. The whole treatment takes but a half minute for each soldier. Investigations concerning the present treatment of cholera were made in the Balkan war, especially by the famous specialist, Dr. Bruno Bussow, who now has charge of a field laboratory as surgeon of his regiment. The investigations showed that this vaccination, which works on the same principle as do other vaccinations, at the very least insures an extremely light attack of the terrible disease. The treatment is repeated after one week, has no unpleasant results, and lasts, if effective, three months. Wandering commissions of vaccination are now traversing the entire field of operations in the war, so that in a very short time our troops will no longer have to fear this most dangerous enemy."

SOCIETY PROCEEDINGS

ELEVENTH DISTRICT MEDICAL ASSOCIATION

The Eleventh District Medical Association met in Memorial Hall at Wabash, October 15, at 2 o'clock with Dr. G. R. Daniels of Marion in the chair.

It was the annual meeting and the following officers were elected: President, Dr. James L. Gilbert, Logansport; Secretary-Treasurer, Dr. O. W. McQuown, Marion.

The next meeting will be held at Marion in May, 1915.

Dr. G. G. Eckhart, counselor, made a strong plea for clinics in our district meetings as a means of creating interest and enthusiasm.

The scientific session consisted of the following: "Toxemias of Pregnancy," Dr. C. M. Kennedy, Camden, discussant, Dr. O. R. Lynch, Peru; "A Word on Vaccines," Dr. V. V. Cameron, Marion, discussant, Dr. G. D. Balsbaugh, North Manchester; "The Doctor's Business," Dr. G. D. Kimball, Marion, discussant, Dr. M. C. Clokey, Huntington; "Obscure Points of Infection," Dr. James L. Gilbert, Logansport, discussant, Dr. H. B. Hill, Logansport.

In closing the session Dr. G. R. Daniels, president, urged the doctors present to devote themselves to their county society, both as a stimulant to themselves and a benefit to the profession.

At 6 o'clock a banquet was served at Maccabees' Hall, following which a post-prandial program was given; toastmaster, Dr. F. E. Jaynes, Wabash; "Every Day Will Be Sunday By and By," Dr. J. E. Johnson, Marion; "Duck and Ducks," Dr. I. E. Perry, North Manchester; "The Twentieth Century Doctor," Dr. J. S. Sprowl, Warren; "Frills and Fancies," Dr. C. H. McCully, Logansport.

Adjourned.

JAMES L. GILBERT, Secretary.

INDIANAPOLIS MEDICAL SOCIETY

Meeting of Oct. 6, 1914, Washington Hotel

Meeting was called to order by J. W. Carmack. Application of Dr. G. D. Mottier was read for the first time; those of Drs. William V. Boyle and C. W. Rutledge for the second time. Attendance, 117.

Dr. Tom Williams of Washington, D. C., addressed the society on "The Traumatic Neurosis in Relation to Workmen's Compensation."

DISCUSSION

Dr. Neu: Medicolegal questions are vastly important. It is true that most patients begin to improve when a compensation is allowed. Have never seen a case recover before court trial.

Dr. Ford: These cases recover when trial is over. Eliminate memory and these cases will get well. Many are neurotic in history only. Constant discussion in family makes one a neurotic. Suggestion is at bottom of most cases. A suggestion of a doctor is often at fault. State has no compensation law. These patients are honest, conscientious and are not to blame.

Dr. Sterne: Generalities in this phase of study are unfair. We have a reality to deal with. Compensation is at the bottom. People purposely get injured for compensation. These conditions are not neurasthenia at all. Physical debility—psychasthenia through obsessions. Obsession obtains as long as the stimuli obtain. We are all influenced. The most honest of us are. Any employer should give his company or corporation service.

Dr. Hannah Graham: It stands us in hand to know the truth. No deviation from it will answer.

ALFRED HENRY, Secretary.

Meeting of Oct. 13, 1914, Washington Hotel

Society was called to order by the president, and minutes of previous meeting read and approved. The secretary then read a resolution of respect from the society for the late Dr. Harriet E. Turner, which by motion was spread on the minutes of the society. The secretary then presented a bill of \$9.70 in connection with the float used on Disease Prevention Day, which was allowed. The matter of \$50 that had been paid for the society to the fund for Disease Prevention Day by Dr. T. B. Eastman, was brought up and allowed. Dr. A. S. Jaeger moved that the application of Dr. B. M. Gundelfinger be brought back to the council for further consideration, and that the sponsors have the privilege of a hearing before the council; carried.

"Some Medical Aspects of Intestinal Stasis Relative to Cause and Treatment."—Dr. William H. Foreman.

A common cause of intestinal stasis is deficient motor activity of the colon and rectum. The motor power of the colon and rectum depends on various factors: viz., a lack of proper stimulation of intestinal movements; inhibition of bowel motor activity due to mental states, and abdominal or pelvic irritation, inflammation or pain; weakness of the bowel musculature from atony, disease or improper nourishment; ineffective intra-abdominal pressure; ptosis of the colon; colitis and colonic adhesions and membranes; undue colonic stasis, and benign or malignant obstruction. A second common cause of intestinal

stasis is imperfect defecation, by which is meant that defecation is infrequent or incomplete or both. Various factors enter into the efficient act of defecation: viz., the motor power of the colon and rectum; inhibition due to mental states, disease of the rectum, and pelvic or abdominal inflammation or pain; the defecation reflex; voluntary effort, and undue pelvic stasis. A small minority of the cases of intestinal stasis are wholly surgical, a larger minority are medical at first and postoperatively, while the great majority are medical at all times. The more important medical therapeutic measures are: foods, drugs, regular habits, hygiene, enemas, the abdominal support or corset, exercise or recreation, massage, hydrotherapy, rest and forced feeding.

DISCUSSION

Dr. H. H. Wheeler: Stasis is contributory to constipation, but we must also treat it from the standpoint of intoxication. We may have a stasis where the bowels move two or three times a day, or we may have a case of stasis where the bowels move only once in three days. Stasis depends greatly upon the intoxication, and not on the number of bowel movements a day. Stasis must be dealt with from the physiologic, pathologic and anatomic standpoints. Pathologically, I think stasis may be brought on by a great many causes that are external to the bowels. Stasis may be brought on from conditions internal to the bowel, and from conditions external to the bowel, so when we are treating stasis we must treat it from the standpoint of causes. If you have a stasis brought on from cholecystitis, by appendicitis, by fissure, or hemorrhoids, it is necessary to treat this condition as the primary causing factor of stasis. Out of one hundred cases in girls 12 years of age, 56 per cent. of these had enteroptosis, while in the clinic 5 per cent. of males had gastropptosis. So if you find 50 per cent. of girls at 12 with a dropping down of the abdominal organs, you can see that we should begin treating these cases in childhood.

Dr. A. C. Kimberlin: One thing that appeals to my mind very strongly is the inestimable value which we have derived from the work of the roentgenologists along this line. While we may not always be in accord with what they tell us and may not believe their conclusions, yet we are each one of us forced to recognize the fact that they have done more in putting us right in the study of this very important subject which leads ultimately to the relief and cure of our patients, than any other one single line of work. We have so many factors entering into this that when a patient first comes, the first thing that goes through your mind is, "What is the cause?" And when you begin to enumerate the causes you are lost at once, because there are so many, so you begin to try to find the most important one. It may be the habit of the individual; it may be purely nervous—psychic, it may be some of the infections spoken of by Dr. Wheeler—appendicitis, as well as gall-bladder disease, it may be habit, or occupation, for we know that causes intestinal stasis; we know how errors in diet will bring about this condition; we know how social customs is the most fruitful cause of all we have to deal with, especially among women; we know, too, the part that clothing and the corset play. The time of going to stool for persons who are constipated is when they feel the first desire or inclination. Salines only exert a slight detergent influ-

ence and spend practically their whole force on the upper intestinal tract. Abdominal supports, where you have ptosis in a certain class of cases, do a great deal of good. Perhaps they will rank along fairly well with the results obtained by surgery. However, there are a great many cases of intestinal stasis, particularly when it is complicated with ptosis, in which abdominal supports are no good at all. Most abdominal supports, the way they are fitted and adjusted, are of little or no value except for their psychic effect. Surgery plays a part in selected cases, but in only a few of the great class which Dr. Foreman has presented to us to-night.

Dr. F. W. Foxworthy cited one case in which the Roentgen ray was used after a man had a restriction of the transverse colon and had been given Epsom salts every two hours for two weeks. In that case surgery was the only relief that could be given the patient. Another case was mentioned in which the Roentgen ray showed a condition in which it was supposed an operation was demanded. In that case surgery did no good at all, although the Roentgen ray showed just the condition.

Dr. A. E. Sterne: I think the essayist errs in one point, and that is if the distinguishing characteristic is the motor force of the bowel, we should speak of the condition as intestinal "atony." We are very much behindhand when we fail to realize that the day of enteroptosis is rapidly passing away. We are dealing with intestinal atony, with lack of power. The question as to the position of the organ in the abdomen in itself is of comparatively little importance. An organ which is malplaced, which is ptosed, and at the same time whose function is interfered with, is another proposition altogether. But we must not lose sight of the fact that the physiology of these organs is important, the power that these organs represent in their peristaltic force. The roentgen-ray plate alone is very misleading. Conditions such as chronic nervous indigestion, chronic nervous dyspepsia, do not exist at all, except in the minds of some physicians and a great many patients. Acute nervous indigestion, acute nervous dyspepsia, is very common. I have come to the opinion that mere platting of the abdomen, especially in relation to the bowel, is comparatively valueless, and that it should be associated with screening.

Dr. Foreman (closing): There are so many things that enter into the motor power of the colon. One is atony; another element is ptosis, which does not always mean so much. It can mean something or nothing. Then another element is the mental side of the individual; then there is pain, there is appendicitis, or any pain in the abdomen or pelvis. Then there are adhesions that come from a colitis—and there are so many conditions that cause a lack of motility of the bowel. I believe that most of the cases are medical. I believe that the position of the bowel has very little to do with stasis.

ALFRED HENRY, Secretary

Meeting of Oct. 20, 1914, Washington Hotel

Meeting was called to order by the president and minutes of previous meeting read and approved. The application of Dr. C. K. Jones was read the first time. Attendance ninety-five.

Dr. A. B. Graham, chairman of committee on permanent quarters for the society, reported the committee was unable after several meetings to come to

any agreement and asked to have the committee discharged. By carried motion this was done.

"Anesthesia from the Standpoint of the Occasional Anesthetist."—Dr. S. L. Egart.

The occasional anesthetist needs to be encouraged when he has to assume this grave responsibility, but very often it could be avoided. When such is the case the physician and the surgeon should insist on having a competent man for this work. Means were pointed out whereby they, in the opinion of the essayist, might accomplish this without injuring their patronage. If men were led to use in this regard the same prudence that they use in other business matters the anesthetist would be encouraged to remain in his field and thus the plane of anesthetic efficiency be brought by long practice to as high a degree of perfection as the other branches of surgery. Ether should be preferred to chloroform, and the open drop method used as being the safest and most clearly definable and as tending to keep the attention centered on the patient. Evidences of narcosis should be weighed in reference to the state of respirations especially which are the most important. The anesthetist should watch his patient carefully at all times, but even when all is well should make examinations at intervals.

"Pemphigus in a Paretic"; Case report showing patient.—Drs. Max Bahr and F. C. Potter.

Presented a case of pemphigus in a paretic with also numerous photographic illustrations of the case during its different stages. The patient was a male, aged 51, and painter by occupation. He contracted syphilis twenty years previous and gave positive Wassermann of the blood and spinal fluid. The spinal fluid in addition gave a strongly positive reaction for globulin and a pleocytosis. After scrubbing the back with soap and water, followed by alcohol and tincture of iodine, a lumbar puncture was done, and the following morning a single bleb five inches above and two inches to the left of the point punctured, was noted. These blebs appeared in successive crops for nine consecutive days and on the seventeenth day began to disappear. These blebs presented a circular base and were filled with clear, pale fluid, which escaped on puncture. The skin including the margin of the bleb, was whitish in color. The fluid contained in the blebs gave a strongly positive Wassermann reaction. The various types of pemphigus were considered as the vulgaris, foliaceus, vegetans and neonatorum. Differential diagnosis for dermatitis herpetiformis, bullous lesions associated with neuritis and bullous syphiloderma were considered. The explanation for the appearance of the pemphigus eruption in the location designated and under existing conditions was on account of the probable low resisting power of the skin in paretics in consequence of the frequent trophic disturbance in this disease.

DISCUSSION

Dr. Link: Enthusiasm means efficiency which holds good in anesthesia. No better anesthetists are found in the United States than in Indianapolis. We should have more papers on anesthetics. Let the surgeon help the expert anesthetist collect a better fee—a fee commensurate with his services.

Dr. Lillian Mueller: The more anesthetics one gives the more efficient he becomes. It is a serious matter. Statistics show a mortality of one in thirty thousand. After effects are guarded more carefully

now than formerly. No one can give a good anesthetic and carry on a conversation. Everything should be watched to insure no regrets afterwards.

Dr. Cabalzer: Graduates only should give anesthetics. I condemn nurses giving anesthetics. The expert knows all the work and has a broad field of experience. An expert makes the surgeon's mind easy. He observes his patient at all times. Scopolamin and morphin have made beginning easier.

Dr. Gregor: Case under consideration comes in class of pemphigus necrotica. Cited a case in clinic. Cited another case of herpetiform, During, mistaken for pemphigus vulgaris, which arsenic cured.

Dr. Brayton: Three cases of pemphigus neonatorum, vaccinal pemphigus and pemphigus vulgaris were mentioned and many cases cited, especially of the latter. Pemphigus foliasis was a fourth classification, definite cases of which were mentioned. In the bullous erythemas the dermatologist has added very little to curative measures.

Drs. Egart and Bahr closed the discussion. Dr. Bahr said the case of pemphigus in a paretic was presented with one thing in mind; viz., its relation to syphilis.

ALFRED HENRY, Secretary.

Meeting of Oct. 27, 1914, City Hospital

Meeting was called to order by the president. Minutes of previous meeting read and approved. Drs. Carl W. Rutledge and William V. Boyle were elected to membership.

Dr. J. H. Taylor presented the following cases: (a) child, 5, with an apparent hydrocephalus but symptoms not bearing it out; (b) boy, 3, with a probable incipient cerebrospinal meningitis; (c) boy, 3, with complete recovery from cerebrospinal meningitis; serum used early; (d) child, 4, cerebrospinal meningitis, has been blind and paralyzed completely. Both were clearing up. Serum used early.

Dr. H. R. Allen read a paper on "External Bone Plating," and presented a case showing an instrument for reducing fractures and his apparatus for holding fragments in position. This apparatus consists of external plates which lie outside of the body and have long projecting pins that penetrate one or both layers of hard bone substance. This external plate is unclamped and the pins when withdrawn leave no foreign body after union occurs.

Dr. A. W. Brayton presented two cases: (a) a typical case of prurigo hebra. This patient was a girl, 12, who had had the disease since babyhood. Scars from early lesions as well as recent lesions could be seen. A general adenitis could easily be shown. (b) a man of early adult life, having an early case of neurofibroma. (Recklinghausen's Disease). Dr. Brayton stated this was uncommon and the first case presented in his recollection at the City Hospital.

Dr. Frank B. Wynn presented four cases of cardiac syphilis, one of syphilitic aortitis. Dr. Wynn stated that men who wrote most on this subject recommended mercury especially as a remedial agent. Dr. Wynn also showed a pathologic specimen of aortic aneurysm, probably of syphilitic origin.

Time did not permit general discussion. Dr. J. W. Sluss, superintendent of the City Hospital served elaborate refreshments.

ALFRED HENRY, Secretary.

FORT WAYNE MEDICAL SOCIETY

Meeting of Feb. 3, 1914

Society met in regular session in the assembly room of the Court House with eighteen members present. Meeting called to order by President Dancer. Minutes of preceding meeting read and approved.

Dr. Rhamy reported a case of amebic dysentery.

On Jan. 28, 1914, I received a sample of feces from Dr. L. H. Cook of Bluffton, Ind., accompanied by the following history: Female, aged 18 years, attacks of diarrhea for the past nine months—from ten to twenty bowel movements each day, some of them bloody and occasionally a stool appeared to be pure blood. The lymphatic glands were somewhat enlarged and with considerable tenderness over abdomen.

Examination of the stool showed the following characteristics: Movement was natural in color and diarrheal in character. There was a trace of occult blood. No unchanged bile.

Microscopically there were numerous pus cells, a few blood cells, many epithelial cells, much mucus, the usual bacterial flora, a few vegetable cells and numerous actively motile parasites of the variety known as Monadines. These parasites were oval in shape and pointed at each end—size about 5 by 8 microns. The ordinary Monadine or other intestinal parasite soon loses its motility after leaving the bowel and the stool usually must be examined within an hour or two while in a warm stage in order to demonstrate the motility or ameboid movement. This parasite which I have under the microscope differs in that although this sample is two days old and is cold, the parasites are still very active. The sample presented under the microscope is a second sample from this case as I wanted to corroborate the first finding before presenting the case. In both specimens precautions were taken to prevent any outside contamination. In this last specimen I find two or three of these minute parasites in each microscopic field.

I have several times reported cases of Monadine bowel infection before this society and my first report which was some six or eight years ago, was, I believe, one of the first cases in which this organism was credited as being pathogenic. I believe the case reported this evening proves conclusively that the organism is pathogenic.

DISCUSSION

Dr. Porter, Jr.: That this variety of ameba is found comparatively rare is true, but it has been found in normal stools often. I have never seen a case where the ameba stayed alive a great length of time.

Dr. Porter reported the following cases:

CASE 1.—Male, with the usual symptoms of appendicitis. On opening the abdomen could not find large bowel until after unravelling a great quantity of adhesions; cecum had a long mesentery and could be put any place in the abdomen; there was also a broad typical pericolic band covering in the cecum.

CASE 2.—Case history of an operation for appendicitis where upon delivering the cecum it was found that the appendix was pointing upward and adherent in the region of the liver (pyloric region), and was gangrenous.

Dr. Wheelock has seen three interesting mastoid cases recently due to pneumococcic infection.

CASE 1.—Male with all the signs of acute mastoiditis. Perforation through the process and appearing under the skin. Lateral sinus exposed. Prompt recovery ten days following operation.

CASE 2.—A case of ear trouble with cerebral involvement; temperature 104 F.; pain in head; vomiting; discharge from auditory canal; no evidence of sinus involvement; no tenderness over mastoid; temperature curve of typical sepsis; vomiting still continued; breath had odor of acetone and acetone was found in urine; she was put on large doses of sodium bicarbonate; temperature came to normal and remained so for four days; had chill; temperature then reached 104 F. Radical mastoid done. Normal temperature since operation. Recovery complete.

CASE 3.—Influenzal infection one week ago; acute otitis, perforation tympanum; discharging ear; vomiting; somnolent condition developed; pain over tip of mastoid; tenderness; radical mastoid. Pus pockets in the tip. Recovery.

DISCUSSION

Dr. Porter: The history of this second case looks very suspicious of brain abscess.

Paper on "Sympathetic Ophthalmia" by Dr. Wheelock. In this paper Dr. Wheelock emphasized the importance of the increase in the lymphocytes as a diagnostic aid in sympathetic ophthalmia.

DISCUSSION

Dr. Rhamy: The blood problem in sympathetic ophthalmia is very interesting. Heretofore we have been in the habit of attributing the increase of large lymphocytes as diagnostic of parasitic conditions. The eosinophilic count runs from 3 per cent. to 12 per cent. in syphilis. If it is true that a large lymphocyte count indicates developing ophthalmia, this is a very interesting discovery.

Dr. A. F. Phillips: If an exciting eye is removed there is no danger of developing sympathetic ophthalmia in the other eye. In a few cases it has occurred after forty years.

Dr. McCaskey: Dr. Vaughn, Jr., described the leucocytic picture after the injection in cancer cases with cancer residue.* It impressed me that we must pay more attention to the large mononuclear cells. It is of more importance than we have heretofore thought. Further investigation along the line of parasitic infection in cases of sympathetic ophthalmia may bring to light some known parasite.

Dr. Rhamy: In the injection of cancer emulsion in cancer cases, it may be that a foreign proteid is responsible for the increase in the large mononuclear cells.

Dr. Glock: A very large number of eyes in cases of sympathetic ophthalmia have been treated with the systemic use of mercury, atoxyl, etc., not because of the fact that the case is due to syphilis.

Dr. Porter, Jr.: Only during the presence of skin symptoms of syphilis would the eosinophil count be as high as that given in this paper.

Dr. Bruggeman: It would not make much difference as far as therapy is concerned, according to this table of blood counts, whether the Wassermann reaction was present or not. An injection of salvarsan may be of service in the treatment of sympathetic ophthalmia.

Dr. Edlavitch: There are very few conditions at present in which a differential count is not of im-

portance in the differential diagnosis of disease. Therefore this observation is of great importance. It may be demonstrated in time that sympathetic ophthalmia may be due to some parasitic infection. The therapeutic effect of salvarsan in this condition is so striking that it would seem that a parasitic infection in sympathetic ophthalmia is probable.

Dr. Wheelock (in closing): A foreign body in the eye should never be left. If I cannot remove the foreign body I will remove the eye. The findings as related in this table of the blood picture are good and from a reliable source.

Bill of \$5 to C. J. Lose allowed.

GARRETTE VAN SWERINGEN, Secretary.

Meeting of Feb. 10, 1914

Society met in regular session in the assembly room with twenty-three members present. Meeting called to order by the president. Minutes of preceding meeting read and approved.

Dr. Glock reported the case history of a case of mastoiditis of three weeks' duration in which the dura was exposed for $\frac{1}{2}$ inch.

Dr. Duemling: The time elapsing between a mastoid and a streptococcal infection may be very short. Quite a few cases of acute appendicitis occur following acute gonorrhea. I have had several cases of this type.

Dr. Zehr reported the following case: Female, 54 years of age; dyspneic; had pneumonia; one and one-half days ago developed thirst; polyuria. Examination showed nothing except enlarged abdomen; liver dullness lower than it ought to be; extended down almost to the crest of ileum; movable; blood examination negative; hemoglobin 95 per cent.; blood-pressure 215; urine albumin, sugar, granular casts. Most of her suffering was from the dyspnea.

DISCUSSION

Dr. G. Van Sweringen: The presence of the glycosuria is interesting. If this be a primary hepatic disease it has produced a rapid enlargement. Dyspnea cannot be readily explained with negative chest findings.

Dr. Erwin: I have had one or two cases of glycosuria with a chronic pancreatitis. Glycosuria without a large output of urine usually indicates pancreatic disease.

Dr. Dancer: I saw this case a week or two ago and I did not think this liver was much enlarged but ptosed.

Dr. Zehr (in closing): A post-mortem examination in this case showed nutmeg liver, granular kidneys, atrophic spleen, heart enlarged, and brown atrophy of the muscle.

Dr. Duemling reported three cases and exhibited specimens.

CASE 1.—Goiter.

CASE 2.—Pyonephrosis.

CASE 3.—Polycystic kidney.

DISCUSSION

Dr. Bruggeman: Hypernephroma were so-called because they were thought to be misplaced adrenal tissue. It has been found since that the adrenal gland does not develop anywhere near the kidney. Some pathologists maintain that these tumors have their

origin from same source. The question is an open one. A tumor of any kind of the kidney may produce the same symptoms. The method of removal of the kidney employed by Dr. Duemling is the best one.

Dr. Rawles: The microscopic section of hypernephroma shows adrenal cells.

Dr. B. Van Sweringen: As far as the physical possibility of taking these tumors out in the back is concerned I have seen a number of large tumors of this kind removed by this method.

Dr. McOscar: I should say that the size of the tumor would determine the method of its removal. Any method which would allow of the removal of the mass without entering the abdominal cavity would be preferable.

Dr. Duemling (in closing): The transperitoneal incision is the best. One cannot say that they remove one-half or two-thirds of the thyroid gland. We can only hope that that portion left behind following operation is sufficiently functional to prevent tetany.

The application of Dr. J. Frank Dinnen was acted on favorably by the board of censors. Motion made and carried that the secretary cast the ballot for Dr. Dinnen for membership. Ballot so cast.

Bill for \$10.40 to Miss Ringwalt allowed. Bill for \$4.75 to Dr. G. Van Sweringen allowed. Motion made that the secretary read at the next meeting the names of those who have not paid dues. Motion so carried.

GARRETTE VAN SWERINGEN, Secretary.

DELAWARE COUNTY MEDICAL SOCIETY

The regular meeting of the Delaware County Medical Society was held in the parlor of the Y. M. C. A. Building at 8 p. m., Friday, October 9, with President Dr. D. M. Green in the chair.

The principal feature of the meeting was the address by Dr. C. Melvin Mix, entitled "Some Points in Diagnosis of Chronic Abdominal Conditions," from which the following abstract was gleaned.

The chapters on symptomatology and pathology in our standard text-books on surgery will have to be rewritten because they largely describe terminal changes and terminal symptoms, and are largely based on post-mortem findings. Practically all of the symptoms of chronic abdominal conditions from the patient's standpoint are grouped under two heads: dyspepsia and constipation, but we have learned the above terms may mean gall-stone disease, chronic pancreatitis, gastric ulcer, appendicitis, etc. We are learning that there is more to appendicitis than general peritonitis or appendiceal abscess; that there is more to gastric ulcer than hemorrhage; more to gall-stone disease than hepatic colic and jaundice; and more to constipation than the inability of the sufferer to have regular and spontaneous evacuations. If it is found that sour stomach and gastric pain come on in distinct attacks lasting some days or weeks, more often in the spring and followed by intervals of complete relief; if the pain develops at a definite time after meals, say two or three hours practically every time; if the pain is relieved by food, soda or vomiting, we have the picture of chronic peptic ulcer. Whether the ulcer is located in the stomach or duodenum depends on the interval between the meal and the advent of pain.

The appendix is capable of producing a group of symptoms in close mimicry of true ulcer, but here is no fixed intervals of relief, the pain coming at any time, is epigastric and rarely spreads over the abdomen or into the back. Physical labor will always excite pain. Tenderness is not elicited on any other part of the abdomen, though pressure over the appendix will often cause pain in the epigastrium. The attacks come on at shorter intervals than in ulcer. The lesion found in the appendix in these cases is constant, consisting of clubbing of the distal end due to stricture of the lumen or pressure from bands of adhesions. The truth seems to be that the symptoms of a large majority of the so-called functional disorders of the stomach are due to organic lesions in other parts of the abdominal cavity.

The inaugural symptoms of gall-stone disease are briefly as follows: The patient complains of a dullness which if unrelieved becomes pain. There is acidity and flatulence and belching of sour material. The patient may notice a catch in the right hypochondrium which can be avoided by shallow breathing. A frequent and characteristic symptom is a feeling of chilliness, especially after the evening meal. Another form of dyspepsia, best described as Lane's disease, is worthy of consideration. The miserable sufferer from intestinal toxemia presents the picture of a melancholy dyspeptic with sallow skin, dirty tongue, flacid belly with abdominal contents dragging to the pelvis, offensive breath, dusky lips and nails, cold and damp extremities, and constipation. That these conditions are cured by Sir Arbuthnot Lane by his now world famous colectomies, there remains no doubt.

The work of Adami in Montreal furnishes the first link in the chain of pathological events underlying conditions such as gall-stones, ulcer and appendicitis. Myriads of bacteria escape from the intestinal tract and are carried by the portal system to the liver and are there destroyed. In cases of obstinate constipation this graveyard of the bacteria is overwhelmed and as a result bacteria escape alive into the bile. These bacteria have been reduced in their toxicity to an extent that they do not produce an active infection, but a low-grade inflammation, a sub-infection which is the *modus operandi* of gall-stone disease. When muscle tissue is affected we have the extreme muscular atrophy shown in arthritis deformans and in myocarditis. The only gross lesion we may have in intestinal stasis is an atrophy and consequent dilatation of the colon. Our present knowledge justifies us in assuming that a focal infection arising from some latent abscess either in the tonsil, alveolar process, fallopian tubes, prostate, etc., is responsible for a form of sub-infection which leads to organic changes and thus lays a foundation for constipation and the consequent absorption of toxins produced in the end process of digestion. Since that it has been proven that widely distributed diseases are due to focal infection by various strains of a single organism, would it not be well to readjust our viewpoint in regard to the primary causes of the organic lesions of the abdomen which our patients consider as various manifestations of dyspepsia and constipation?

We surgeons who have concerned ourselves with patching up the terminal conditions will find a narrower field of usefulness when the internist learns better to discover surgical conditions in their incipient or medical stage, and to apply the necessary prophylaxis.

lactic and curative agents. Is it going too far to prophesy that the vigilant family physician working hand in hand with a competent pathologist may in the future accomplish so much that the field of surgery will be restricted largely to the correction of deformities, patching injuries and removing tumors?

H. D. FAIR, Secretary.

ELKHART COUNTY MEDICAL ASSOCIATION

Session of October 1st called to order by President Ash at 2:30 p. m., in Nappanee Club rooms, Nappanee.

Minutes of last two meetings read and approved. Report of Dr. G. W. Spohn, delegate to State Association meeting was read. Transfer of Dr. G. N. Druley to Kosciusko County. Report of board of censors on delinquent members postponed to November meeting. President named the following committee to work with Dr. Spohn in arranging Annual Meeting, January 12, 1915: J. C. Fleming, G. B. Hoopingarner, C. W. Haywood, E. M. Hoover, F. N. Dewey. There were twenty-six members present.

First paper on "Extra- and Intra-Capsular Fractures of the Hip Joint," Dr. W. A. Price, Nappanee. After an exhaustive presentation of the subject the doctor summarized as follows:

| IMPACTED | AGE | NON-IMPACTED |
|--------------------------------------|-----|---------------------------------------|
| Generally under 65. May occur later. | | Generally over 60. May occur earlier. |

HISTORY OF ACCIDENT

| | |
|--|---|
| Force usually comparatively great and applied to trochanter. | Force usually comparatively slight and applied at right angles to the neck, or in line of the long axis of the shaft. |
|--|---|

EVERSION

| | |
|---|---|
| Eversion marked. Resists in eversion made gently. When foot is inverted trochanter rises, but less prominently than that of the well thigh. | Eversion marked but may be slightly overcome; when foot is inverted trochanter does not rise. |
|---|---|

SHORTENING

| | |
|--|--|
| Almost always about $\frac{3}{4}$ inch and constant, can not be increased or lessened by moderate force. | Variable in amount, generally increasing from day to day and can be decreased or diminished by moderate force. |
|--|--|

TROCHANTER

| | |
|--|---|
| Half an inch to one inch too near the crest of the ilium. Position constant and very prominent. Antero-posterior diameter increased and marked tenderness shown on pressure. | May or may not be too near the crest of the ilium and this distance may be increased or decreased at will. Trochanter nearer the median line and hip flattened. Antero-posterior diameter normal and not tender to touch. |
|--|---|

PROGNOSIS

| | |
|---|--|
| May be fatal. Results hopeful. If recovery occurs leg $\frac{3}{4}$ inch to one inch short. | May be fatal. Results uncertain. If recovery occurs one to three inches short. |
|---|--|

TREATMENT

| | |
|---|---|
| Reduction. Proper splint support and extension applied. | Usually no reduction. May apply no dressing. Use massage. May excise head in favorable cases or apply side pressure splint to obtain union. |
|---|---|

Second paper, "Tuberculosis of Joints," E. E. Ash, Goshen. The essayist reviewed the pathology of primary and secondary tuberculous focalization, described the mode of infection of epiphysis, of articular cartilage and membrane. Clinically three forms were noted: (1) hydrops of the joint, (2) fungus form of joint disease, and (3) empyema of the joint. Diagnostic considerations: pain, tenderness, swelling, loss of function, and rigidity, position of the limb, onset and course, family and personal history, temperature, Roentgen-ray and tuberculin test. Differentiate tuberculous joint from simple non-tuberculous joint effusion, chronic gonorrheal arthritis, syphilis, chronic rheumatoid arthritis, and arthritis deformans.

Dr. Ash emphasized the proper treatment of the primary focus of tuberculous infection; if necessary surgical treatment of infection occurring in the respiratory or alimentary tracts, the tonsils or lymph glands. Rest, change of mode or place of living that favored the initial contamination with tubercle bacilli, plaster-of-paris dressing, aspirations, iodoform and glycerine injections, and open surgical treatment were espoused.

DISCUSSION

C. W. Haywood, Elkhart, reported case.—Girl, 14, under observation for a few weeks one year ago. History and clinical evidence showed tuberculous joint. Had been given osteopathic treatment twice a week for over a year. Mother was obliged to hold her on table while manipulations were made. Skiagraph showed the terrible results. Most fractures of hip are mixed intra- and extra-capsular. Shortening of neck is on the posterior side instead of anterior. In children fracture may be in epiphyseal line. Skiagraph essential to absolute diagnosis. Case cited: fracture just below the head of femur; later was operated on and head excised—necrosis due to lack of nourishment to head. Plates shown.

M. K. Krieder, Goshen. Emphasized Roentgen ray. Believes in metastatic origin of epiphyseal and joint infection. Has observed cases of unresolved pneumonia which later developed tuberculous hip.

B. F. Kuhn, Elkhart: In tuberculosis of hip measurements must be carefully taken, must have Roentgen-ray examination, must give family unfavorable prognosis as to integrity of joint following operative treatment. Martin of Philadelphia not in favor of nailing fragments of bone in tuberculosis. Keynote of treatment is rest. Operate only in empyema of joint. Value of iodoform emulsion injections discredited.

G. W. Kirby, Goshen: Aged people with fractured hips should be given every advantage in treatment. They very commonly live many years after a fracture.

Dr. J. C. Fleming, Elkhart: Warns of danger in breaking up an impaction of the bone fragments. Roentgen ray imperative. Scudder, Massachusetts General Hospital, reports sixteen cases with two satisfactory results. Another man reports nineteen with two satisfactory results. These cases do not get proper reduction and are not immobilized long enough. Do not get perfect apposition. Murphy does not use extension; immobilizes both legs in abduction on plaster-of-paris cast or A-shaped splint. If impacted leave alone. If non-impacted in aged patient, Dr. Fleming urges treating patient and leaving hip alone. Cases at 50 to 60 years of age are benefited by nailing fragments. Comparing the modern treatment of

lung tuberculosis with that of joint tuberculosis, the latter is found lacking. In certain European clinics, 50 per cent. die because joint is treated to the exclusion of general treatment. In a certain class of cases, operative interference predisposes to the contamination of the joint from the primary condylar or epiphyseal focus. In cases where operative interference is necessary, merely clean out, fill up with normal salt solution, get out and do not drain. Danger of meddlesome surgery.

F. M. Freeman, Goshen: Joint tuberculosis is amenable to tuberculin therapy if used judiciously in conjunction with other therapy. Tuberculin contains a specific protein which is contained in several preparations. These all are equally valuable.

J. A. Snapp, Goshen: Neglect of injured joints leave foci favorable to tuberculous metastatic infection.

W. B. Krieder, Goshen: Made a curious and surprising observation, namely, all cases of joint diseases invariably showed phimosis.

J. A. Work, Sr., Elkhart: Cases cited: (1) Old woman on fracture bed eight weeks—nice recovery. (2) Man thrown from sleigh onto icy street—in bed seven weeks, $1\frac{1}{2}$ inches shortening. (3) Old woman, fracture, bed eight weeks, perfect union. (4) Old woman, same treatment, persistence of weakness in that leg with no deformity.

E. M. Hoover, Elkhart: Fusiform shape of tuberculous elbow joint.

I. J. Becknell, Goshen: Old idea of Sayre apparatus defended. Big advantage in open-air treatment. Diagnosis of hip joint disease: (1) peculiar position of child while undressing; (2) alignment of gluteal folds; (3) placing patient on hard table and noting that pelvis rides while back of child will be free of table. Advocates extension in old persons.

J. A. Work, Jr., Elkhart: Described H. R. Allen's fracture bed of canvas strung on gas-pipe frame. Every convenience of patient is suited and the injured leg is kept $\frac{1}{4}$ inch longer than the good leg during the eight to ten weeks patient stays on the frame. Absolute control over the destiny of the fractured bone. Reported case which attests to idealism of this treatment.

E. E. Ash (closing): Said he referred in discussion of open treatment of tuberculous joints only to those exhibiting abscess formation.

JAMES A. WORK, JR., Secretary.

GRANT COUNTY

The October meeting of this society was held on Tuesday evening, October 27, in LaFontaine and was a joint session with the Wabash County Society.

Dinner was served at 7 o'clock in the basement of the Methodist Church. The scientific session assembled at 8 o'clock in the auditorium with President Kimball of this society in the chair. This being a joint session the order of business was dispensed with and the floor yielded to Dr. G. G. Eckhart of Marion who spoke for half an hour on "The Diagnosis and Treatment of Certain Surgical Diseases of the Pelvis."

The subject was ably presented and elicited great interest. The chief conditions touched on were: enlarged veins of the broad ligament, ovariectomy and its results, inversion of uterus, carcinoma of uterus, pelvic peritonitis, and surgical shock. Those partici-

pating in the discussion were Drs. Smith, Fankboner, Domer, Loomis, Kimball, Bechtol, Cameron and Powell.

Dr. Smith, in behalf of the Wabash County Society thanked the Grant County Society for extending to them the invitation to meet with them and expressed the pleasure that it had given them to do so.

Dr. Johnson moved that the thanks of the societies be tendered Dr. E. O. Daniels and the ladies of LaFontaine for the entertainment provided by them. Carried.

Those in attendance were, from the Wabash Society: Drs. L. W. Smith, W. A. Domer, L. O. Sholty, L. E. Jewett, Z. M. Beamen, F. S. Kitson, G. D. Balsbaugh, Ira Perry, E. O. Daniels; from the Grant Society: Drs. G. D. Kimball, W. A. Fankboner, G. G. Eckhart, W. H. Braunlin, N. B. Powell, J. D. McKay, V. V. Cameron, O. W. McQuown, J. M. Toney, J. F. Loomis, L. H. Eshelman, J. Maurer, C. O. Bechtol and J. E. Johnson.

J. E. JOHNSON, Secretary.

HENDRICKS COUNTY

The Hendricks County Medical Society met in regular quarterly session October 23 with President W. H. Terrell in the chair. About half of the membership were in attendance. The president's retiring address was on the objects and needs of the county society. The secretary read a paper prepared by another, on the "Ideal County Medical Society." These papers were freely discussed by nearly every member present.

The officers chosen for 1915 are Rilas E. Jones of Clayton, president; Thomas J. Barker, vice-president; secretary-treasurer, W. T. Lawson of Danville. By unanimous vote the president was instructed to appoint a legislative committee of three, who would have power to act for the society in conjunction with the committee of the state society. Dr. Amos Carter of Plainfield was chosen to represent the society in the House of Delegates.

W. T. LAWSON, Secretary.

JASPER-NEWTON COUNTY MEDICAL SOCIETY

The Jasper County Medical Society held its tenth meeting for 1914 as guest of Drs. Kinneman, Kennedy and Bassett at the home of Dr. Kennedy at Goodland on October 28. Besides the Jasper members—Washburn, Kresler, English, Loy, Besser and Gwin, and the three hosts—two Kentland physicians were present, Drs. Mathews and Van Kirk.

The meeting was presided over by the president, Dr. English. On motion of Dr. Washburn, supported by the secretary, it was decided to form a joint Jasper-Newton Society, with the 1914 plan of meeting at the different homes prevailing during the summer, but the winter meetings all to be held at Remington because of its more central location.

The papers of this meeting took up the study of drug action. The paper and the discussion on strychnin brought out several pertinent points that had been observed, namely; it is not a heart-acting drug directly but through the cerebrospinal centers, therefore its combination with true heart drugs. Its overuse was noted by all members—its good action in true neurasthenia was mentioned especially when carried up to $1/12$ of a grain at a dose.

Digitalis and *strophanthus* were contrasted in one paper and a notable point brought out was the experience that because of the untrustworthy preparations of *digitalis* on the American market it is safer for the general practitioner to depend on *strophanthus* until *digitalis* has been standardized in this country as well at least as in Germany. The fresh infusion of *digitalis* is preferred to other forms in kidney lesions.

The study of pituitrin other than in obstetrics was taken up and its intimate relation with the other internal secretion organs made its use rather experimental and hazardous until the physiology and chemistry was more definitely known. Its use in connection with strychnin in pneumonia was mentioned. The nitrites as a study proved interesting in their blood pressure depressing quality. Sodium nitrite in an average of 2 grain doses was preferred in the regular use other than temporary.

The society this year has had excellent attendance and good papers and it is evident that our plan of each member a host with a lunch following in the members homes has been an essential factor.

M. D. GWYN, Secretary.

LAKE COUNTY MEDICAL SOCIETY

A joint meeting of the Lake County Medical and Dental Societies was held at the Hammond Country Club, Wednesday, October 7. In attendance were thirty-three physicians and twelve dentists.

The afternoon was devoted to golf and tennis, together with various other amusements. Dinner was served at 6:30 p. m., after which Dr. Frederiek B. Moorehead of Chicago gave a most interesting talk on "The Mouth as a Factor in Pathogenesis." Owing to the broad field covered by the subject, Dr. Moorehead touched only the "high spots," but has promised to come out again and give an illustrated talk.

This was the first time the two societies have held a joint meeting and the result was very gratifying to the committee in charge. We propose to make it an annual event, and would recommend that other societies try the plan.

E. M. SHANKLIN, Secretary.

THE MUNCIE ACADEMY OF MEDICINE

For more than a year a few of the physicians of Muncie and surrounding towns have been holding weekly meetings for the purpose of study and investigation of timely matters of real interest to the profession. This society, somewhat informal, was popularly known as The Quiz Club, a part of each meeting being in charge of a quiz master who announced his subject one or two weeks in advance. These meetings increased in interest till it was evident a more complete and permanent organization would be desirable; consequently on the night of October 30th, the society was reorganized under the name The Muncie Academy of Medicine, with two classes of members, the active (Fellows) and associate (Honorary). The officers, elected for one year, are: President, Dr. O. E. Spurgeon, first vice-president, Dr. D. M. Green, second vice-president, Dr. C. M. Mix, secretary-treasurer, Dr. H. D. Fair.

For the present the meetings will be held in the parlor of the Y. M. C. A. Building on every Friday night except the first of each month, this being the regular meeting night of the Delaware County Med-

ical Society. This arrangement gives Muncie a medical assembly every Friday night in the year.

The purpose of the Muncie Academy of Medicine as expressed in the constitution is four-fold, viz.:

1. Study of vital problems and basic principles of medicine and surgery.
2. Promotion of a medical library.
3. Founding of a medical museum.
4. Promotion of cooperation among physicians for scientific, social and financial improvement.

Any regularly qualified and licensed physician in good standing and living within a reasonable distance of Muncie is eligible for membership.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1914, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

HYPODERMIC TABLETS OF EMETINE HYDROCHLORIDE, MULFORD.—Each tablet contains emetine hydrochloride, 0.016 Gm. H. K. Mulford Co., Philadelphia, (*Jour. A. M. A.*, Oct. 3, 1914, p. 1204).

ACNE VACCINE.—Marketed in boxes of 4 syringes containing 25, 50, 100 and 200 million killed bacilli; also in boxes of 2 syringes containing 50 and 200 million killed bacilli; boxes of 6 ampoules containing 10, 25, 50, 100, 200 and 500 million killed bacilli, with a syringe; and boxes of 2 ampoules containing 50 and 200 million killed bacilli, with a syringe. E. R. Squibb & Sons, New York.

BACILLUS COLI COMMUNIS VACCINE.—Marketed in boxes of 4 syringes containing 100, 200, 500 and 1,000 million killed bacilli; also boxes of 2 syringes containing 100 and 500 million killed bacilli and boxes of 2 ampoules containing 100 and 500 million killed bacilli, with a syringe. E. R. Squibb & Sons, New York.

BACILLUS PERTUSSIS VACCINE.—Marketed in boxes of 4 syringes containing 25, 50, 100 and 200 million killed bacilli; also boxes of 2 syringes containing 50 and 200 million killed bacilli; boxes of 6 ampoules containing 25, 50, 100, 200, 300 and 500 million killed bacilli, with a syringe; and boxes of 2 ampoules containing 50 and 200 million killed bacilli, with a syringe. E. R. Squibb & Sons, New York.

PYOCYANEUS VACCINE.—Marketed in boxes of 4 syringes containing 100, 200, 500 and 1,000 million killed bacilli; also in boxes of 2 syringes containing 100 and 500 million killed bacilli. E. R. Squibb & Sons, New York.

GNOCOCCUS VACCINE.—Marketed in boxes of 4 syringes containing 100, 200 and 500 million killed gonococci; also in boxes of 2 syringes containing 100 and 500 million killed gonococci; boxes of 6 ampoules containing 50, 100, 150, 350, 500 and 1,000 million killed gonococci, with a syringe; and boxes of 2 ampoules containing 100 and 500 million killed gonococci, with a syringe. E. R. Squibb & Sons, New York (*Jour. A. M. A.*, Oct. 3, 1914, p. 1204).

MENINGOCOCCUS VACCINE, IMMUNIZING.—Marketed in boxes of 3 syringes containing 100, 500 and 1,000 million killed meningococci. E. R. Squibb & Sons, New York.

MENINGOCOCCUS VACCINE, CURATIVE.—Marketed in boxes of 4 syringes containing 100, 200, 400 and 500 million killed meningococci; also in boxes of 2 syringes containing 100 and 500 million killed meningococci; boxes of 6 ampoules containing 100, 100,

500, 500, 1,000 and 1,000 million killed meningococci, with a syringe, and boxes of 2 ampoules containing 100 and 500 million killed meningococci, with a syringe. E. R. Squibb & Sons, New York.

PNEUMOCOCCUS VACCINE.—Marketed in boxes of 4 syringes containing respectively 100, 200, 400 and 500 million killed pneumococci; boxes of 2 syringes containing respectively 100 and 500 million killed pneumococci; boxes of 6 ampoules containing 100, 100, 500, 500, 1,000 and 1,000 million killed pneumococci, with a syringe, and boxes of 2 ampoules containing 100 and 500 million killed pneumococci, with a syringe. E. R. Squibb & Sons, New York.

STAPHYLO-ACNE VACCINE.—Marketed in boxes of 4 syringes containing 100 million killed staphylococci and 25 million killed acne bacilli, 200 million killed staphylococci and 50 million acne bacilli, 400 million killed staphylococci and 100 million killed acne bacilli, and 500 million killed staphylococci and 200 million killed acne bacilli; boxes of 2 syringes containing 100 million killed staphylococci and 50 million killed acne bacilli and 500 million killed staphylococci and 200 million killed acne bacilli; boxes of 2 ampoules containing 100 million killed staphylococci and 50 million killed acne bacilli and 500 million killed staphylococci and 200 million killed acne bacilli, with a syringe. E. R. Squibb & Sons, New York.

STAPHYLOCOCCUS VACCINE.—Marketed in boxes of 4 syringes containing 100, 200, 500 and 1,000 million killed staphylococci; also in boxes of 2 syringes containing 100 and 500 million killed staphylococci; boxes of 6 ampoules containing 100, 250, 500, 500, 1,000 and 2,000 million killed staphylococci, with a syringe, and boxes of 2 ampoules containing 100 and 500 million killed staphylococci, with a syringe. E. R. Squibb & Sons, New York.

STREPTOCOCCUS VACCINE.—Marketed in boxes of 4 syringes containing 100, 200, 500 and 1,000 million killed streptococci; also in boxes of 2 syringes containing 100 and 500 million killed streptococci; boxes of 2 ampoules containing 100 and 500 million killed streptococci, with a syringe. E. R. Squibb & Sons, New York.

TYPHOID VACCINE, CURATIVE.—Marketed in boxes of 4 syringes containing 100, 200, 500 and 1,000 million killed bacilli; also in boxes of 2 syringes containing 100 and 500 million killed bacilli; boxes of 6 ampoules containing 100, 100, 500, 500, 1,000 and 1,000 million killed bacilli, with a syringe and boxes of 2 ampoules containing 100 and 500 million killed bacilli, with a syringe. E. R. Squibb & Sons, New York.

TYPHOID VACCINE, IMMUNIZING.—Marketed in boxes of 3 syringes containing 500, 1,000 and 1,000 million killed bacilli. E. R. Squibb & Sons, New York.

SMALL-POX (VARIOLA) VACCINE (GLYCERINATED).—Each dose in separate aseptic sealed glass tube, with bulb and needles. Boxes of 5 and boxes of 10 tubes. E. R. Squibb & Sons, New York.

DIPHTHERIA ANTITOXIN.—Curative doses, marketed in syringes containing 2,000, 3,000, 4,000, 5,000, 7,500 and 10,000 units. E. R. Squibb & Sons, New York.

ANTIDYSENTERIC SERUM.—Marketed in vials containing 50 Cc. H. K. Mulford Co., Philadelphia, Pa.

ANTIPNEUMOCOCCIC SERUM, POLYVALENT.—Marketed in syringes containing 20 Cc. Also marketed in vials containing 50 Cc. H. K. Mulford Co., Philadelphia, Pa.

ANTISTREPTOCOCCIC SERUM, POLYVALENT.—Marketed in vials containing 50 Cc. H. K. Mulford Co., Philadelphia, Pa.

ANTISTREPTOCOCCIC SERUM, SCARLATINAL, POLYVALENT.—Marketed in vials containing 50 Cc. H. K. Mulford Co., Philadelphia, Pa.

TYPHO-SEROBACTERIN, MULFORD, IMMUNIZING.—Each package contains 3 syringes of Typho-Serobacterin graduated as follows: First dose, 1,000 million killed sensitized typhoid bacilli; second dose, 2,000 million killed sensitized typhoid bacilli; third dose, 2,000 million killed sensitized typhoid bacilli. H. K. Mulford Co., Philadelphia, Pa. (*Jour. A. M. A.*, Oct. 10, 1914, p. 1296).

CYMARIN.—A neutral, non-glucosidal substance obtained from *Apocynum cannabinum* and *Apocynum androsaemifolium*. Cymarin resembles amorphous strophanthin in its actions and is about equal to it in activity. It is more active when injected intravenously or intramuscularly than when given orally. Its uses are much like those of digitalis, but it is best suited in the form of Cymarin Tablets, 1/200 Gr. and Ampoules Cymarin Solution containing 1/60 Gr. cymarin. The Bayer Co., New York (*Jour. A. M. A.*, Oct. 17, 1914, p. 1393).

MALTINE MALT SOUP EXTRACT.—Maltine containing potassium carbonate, 1.1 Gm. to each 100 Gm. and alcohol, 3.88 per cent. Maltine Co., Brooklyn, N. Y. (*Jour. A. M. A.*, Oct. 24, 1914, p. 1479).

ACNE VACCINE.—Marketed in packages of six syringes each containing 12 million bacteria. Greeley Laboratories, Inc., Boston.

ACNE VACCINE.—Marketed in packages of four syringes containing, respectively, 5, 10, 20 and 40 million killed acne bacilli. Schieffelin & Co., New York.

COLON VACCINE.—Marketed in packages of six syringes each containing 1,000 million bacteria. Greeley Laboratories, Inc., Boston.

COLON VACCINE.—Marketed in packages of two vials each containing, respectively, 50, 100, 200 and 400 million killed bacteria. Schieffelin & Co., New York.

PYOCYANEUS VACCINE.—Marketed in packages of six syringes each containing 1,000 million bacteria. Greeley Laboratories, Inc., Boston.

PYOCYANO-BACTERIN.—Marketed in packages of four syringes containing, respectively, 50, 100, 200 and 400 million killed bacteria. H. K. Mulford Co., Philadelphia, Pa. (*Jour. A. M. A.*, Oct. 24, 1914, p. 1479).

ANTIMENINGOCOCCUS SERUM (ANTIMENINGITIS SERUM).—Marketed in one aseptic glass cylinder containing 30 Cc. with special sterile needle and stylet; also in one 20 Cc. vial. Schieffelin & Co., New York.

GONOCOCCUS VACCINE.—Marketed in packages of six syringes each containing 500 million bacteria. Greeley Laboratories, Inc., Boston.

GONOCOCCUS VACCINE, POLYVALENT.—Marketed in separate syringe packages containing, respectively, 50, 100, 200, 400 and 1,200 million killed bacteria. Schieffelin & Co., New York.

PNEUMOCOCCUS VACCINE.—Marketed in packages of six syringes each containing 500 million bacteria. Greeley Laboratories, Inc., Boston.

STAPHYLOCOCCUS ALBUS VACCINE.—Marketed in packages of six syringes each containing 1,000 million bacteria. Greeley Laboratories, Inc., Boston.

STAPHYLOCOCCUS AUREUS VACCINE.—Marketed in packages of six syringes each containing 1,000 million bacteria. Greeley Laboratories, Inc., Boston.

STREPTO-BACTERIN (HUMAN) POLYVALENT.—Marketed in packages of six ampoules each containing 100 million killed bacteria; also in packages of six ampoules each containing 200 million killed bacteria. The Abbott Alkaloidal Co., Chicago.

STREPTOCOCCUS VACCINE.—Marketed in packages of six syringes each containing 500 million bacteria. Greeley Laboratories, Inc., Boston.

SCARLET FEVER TREATMENT.—Marketed in packages of four vials containing, respectively, 50, 100, 200 and 400 million killed bacteria.

TYPHOID BACILLUS VACCINE.—Marketed in packages of six syringes, each containing 1,000 million bacteria; also in packages of six syringes containing, respectively, 100, 200, 400, 600, 800 and 1,000 million bacteria. Greeley Laboratories, Inc., Boston (*Jour. A. M. A.*, Oct. 31, 1914, p. 1577).

PROPAGANDA FOR REFORM

SEROBACTERINS.—While objection may be made to the sensitized living bacteria used by Besredka because there is always an uncertainty as to the action of living bacteria in the animal body, such danger cannot be attributed to the "serobacterins" because they contain dead bacteria, and so far as known, can do no more harm than other dead bacteria—in fact it is claimed that they are preferable to other vaccines because the toxic products of the bacteria, other than the immunizing properties, have been largely removed. It must be said, however, that these preparations are still in the experimental stage. In great part, careful clinical observations will decide that the serobacterins are really superior to ordinary vaccines (*Jour. A. M. A.*, Oct. 3, 1914, p. 1223).

LACTIC ACID FERMENTS.—There is a large amount of literature to the effect that the *Bacillus bulgaricus* hinders putrefaction in the intestinal canal. While there may be some question as to a greater success in securing the implantation of this bacillus by administering it in "liquid cultures," the report of the Council on Pharmacy and Chemistry shows that such a culture is likely to reach the consumer in a more active state than one in the form of tablets (*Jour. A. M. A.*, Oct. 3, 1914, p. 1223).

AGAR-AGAR BISCUITS.—To make agar-agar biscuits it is only necessary to add finely powdered agar-agar to the flour used in making the biscuit. The amount should be, if possible, sufficient so that a dose of 5 Gm. will be contained in each biscuit (*Jour. A. M. A.*, Oct. 3, 1914, p. 1224).

ACTION OF SODIUM CACODYLATE.—Containing its arsenic in organic combination and in the pentavalent state, which becomes therapeutically active only as it is reduced to the trivalent inorganic state, sodium cacodylate is so slightly toxic that therapeutic doses do not give rise to toxic symptoms. There is nothing in the literature to show that sodium cacodylate has a special action on the eye and blindness from its administration need not be feared (*Jour. A. M. A.*, Oct. 3, 1914, p. 1223).

GLYCOTHYMOLINE REFUSED RECOGNITION.—A report of the Council on Pharmacy and Chemistry cites Glycothymoline as a typical illustration of a "patent medicine" advertised to the public through the doctor. Different formulas have been ascribed to Glycothymoline by its promoters from time to time—but whatever the exact composition of this secret nostrum may be, it has been definitely shown that it is but a weak antiseptic solution. Nevertheless, the advertising circulars recommend the use of Glycothymoline in such serious conditions as diphtheria and ophthalmia of the new-born. Glycothymoline is in conflict with Rules 1 and 4 of the Council on Pharmacy and Chemistry, because of its indefinite composition and the method of advertising it to the public. It is in conflict with Rules 10, 6 and 8, in that it is an unscientific, shot-gun mixture sold under unwarranted therapeutic claims and under a misleading name (*Jour. A. M. A.*, Oct. 10, 1914, p. 1313).

GLYCOTHYMOLINE NOT HARMLESS.—Glycothymoline is a mild antiseptic practically devoid of germicidal power and when used as a simple mouth wash is practically harmless. However, the recommenda-

tions to the public for its use in serious diseases make it a menace to the public health—and physicians are responsible for its wide-spread use (*Jour. A. M. A.*, Oct. 10, 1914, p. 1304).

DECLARED MISBRANDED.—The Federal authorities have secured convictions under the Food and Drugs Act against the following "patent" medicines: Nurito, West Baden Sprudel Water, Radam's Microbe Killer, Dr. Hilton's Specific No. 3, Dr. Sullivan's Sure Solvent, Russell's White Drops. With the exception of the first two the products were declared misbranded chiefly because false and fraudulent therapeutic claims were made for them. Nurito was declared misbranded because false statements in regard to the ingredients were made and West Baden Sprudel Water because it was not a natural water as claimed (*Jour. A. M. A.*, Oct. 17, 1914, pp. 1408 and 1409).

PHENOLAX WAFERS.—These are tablets said to contain phenolphthalein 1 grain, "aromatics" and sugar enough to make 5 grains. It is a question what purpose the "aromatics" and sugar serve, perhaps these are to mislead the unthinking to believe that this combination has some mysterious value over phenolphthalein itself (*Jour. A. M. A.*, Oct. 17, 1914, p. 1410).

PAPINE (BATTLE AND CO.).—This is a simple aqueous alcoholic solution of morphin, 1 grain to each ounce. It is exploited under the utterly unwarranted claim that it does not nauseate, constipate nor create a habit (*Jour. A. M. A.*, Oct. 17, 1914, p. 1411).

CELERINA AND ALETRIS CORDIAL (RIO CHEMICAL CO.).—Celerina is a shot-gun mixture said to contain, in addition to 42 per cent. of alcohol, kola, viburnum, celery, cypripedium, xanthoxylum and aromatics. Aletris Cordial is said to contain 28 per cent. alcohol (more than is found in wine) besides three obsolete and valueless drugs, aletris, helonias and scrophularia. Whatever virtue there is in Celerina and Aletris Cordial is derived from the alcohol (*Jour. A. M. A.*, Oct. 17, 1914, p. 1411).

USE OF PARAFFIN OIL.—While it is recognized that cancer may be caused by chronic irritation, the paraffin oil used medicinally is bland and non-irritating and there is no reason to suppose that its continued use would cause cancer. A good quality of oil may be obtained by prescribing *Paraffinum Liquidum* or *Petrolatum Liquidum Grave* (*Jour. A. M. A.*, Oct. 17, 1914, p. 1411).

HEMO.—The Thompson Malted Food Company, Waukesha, Wis., which sells Hemo, Malted Milk and Malted Beef Peptone, offers its stock to physicians with promises of large profits. Hemo is advertised as "the food that builds up weak stomachs" and is stated to contain "the iron of spinach, the juices of prime beef, the tonic properties of selected malt in powdered form and the richest sweet milk." Hemo is "promoted" by absurdly extravagant claims and pseudo-scientific nonsense. Disregarding the question whether or not this is a stock jobbing scheme or whether the purchase of the stock is a good investment, physicians who buy the stock and prescribe the firm's output are not giving their patients a square deal (*Jour. A. M. A.*, Oct. 24, 1914, p. 1494).

GINSENG.—Despite the fact that the peculiar man-shaped root of ginseng has no medicinal value so far as science can determine, the Koreans for decades paid their tribute to China in ginseng. In China it is reported as a cure for all ills that human flesh is heir to and has a special reputation as an aphrodisiac. Perhaps there is no better illustration of the virtues of aphrodisiacs in general than the fact that the Chinese are quite sure of the marvelous efficacy of ginseng though no evidence of its virtues can be obtained in the West (*Jour. A. M. A.*, Oct. 24, 1914, p. 1486).

BOOK REVIEWS

A MANUAL OF DISEASES OF THE NOSE AND THROAT. By Cornelius G. Coakley, M.D., Clinical Professor of Laryngology in the College of Physicians and Surgeons, Columbia University, New York. New (5th) edition. 12mo, 615 pages, with 139 engravings and 7 colored plates. Cloth. \$2.75 net. Lea & Febiger, Publishers, Philadelphia and New York, 1914.

As in previous editions, this work represents practically all that is recognized as modern in the theory and practice of laryngology. It has the distinction of being concise, yet clear and practical. The illustrations are excellent. While it is particularly adapted to the use of students it will prove a valuable addition to the library of the general physician. The chapter on therapeutics, with numerous valuable formulae, adds to the practical character of the book. Five editions attest to the popularity of the work. The last edition has been very thoroughly revised.

MANUAL OF BIOLOGICAL THERAPEUTICS. Published by Parke, Davis & Co., Detroit, Mich.

This book is handsomely printed in large, clear type, on heavy enameled paper, and bound in cloth. It contains 174 pages of text, upwards of thirty full-page plates in color, and a number of half-tone illustrations in black and white, together with a comprehensive index. As its title suggests, it is a concise and practical treatise on biological therapeutics. The publishers announce that the entire edition is to be distributed gratuitously to members of the medical profession. We suggest the propriety of writing at once for a copy of this "Manual of Biological Therapeutics," addressing the request to Parke, Davis & Co. at their home office in Detroit, Mich. It will not be amiss to mention this journal in writing.

A HANDBOOK OF PSYCHOLOGY AND MENTAL DISEASE for use in training-schools for attendants and nurses in medical classes, and as a ready reference for the practitioner. By C. B. Burr, M.D. Fourth edition, revised and enlarged, with illustrations. Philadelphia. F. A. Davis Company, Publishers, 1914. Price \$1.50.

The fourth edition of this little book intended for medical students and nurses covers the subject for its intended readers in an admirable manner.

The part on psychology is brief but sufficient for the purpose. The portion of the work dealing with the treatment of insanity is divided into two parts; one, the management from the medical standpoint, the other, from the nursing standpoint. This separation is well taken and makes the book of all the more value to both nurses and physicians.

PROGRESSIVE MEDICINE. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., assisted by Leighton F. Appleman, M.D. Vol. III, September, 1914—Diseases of the Thorax and Its Viscera, including the Heart, Lungs and Blood-Vessels; Dermatology and Syphilis; Obstetrics; Diseases of the Nervous System. Lea & Febiger, Philadelphia and New York, 1914. Price \$6.00 per annum.

The most notable advances mentioned in part one are Carrel's experimental operations on the orifices of the heart, wherein he was able to carry out short operative manipulations on various valve leaflets and the walls of the great vessels, the vessels at the base being

clamped for from two to three minutes, with subsequent return of normal cardiac pulsations.

Abel, Rowntree and Turner have contributed experiments which offer many possibilities. By connecting an artery with a series of dialyzing tubes and returning the blood to a vein, extremely delicate analyses of living serum can be made. Another possibility is that by this method toxic substances may be eliminated which have failed to be eliminated by damaged organs.

Under dermatology a very interesting and extensive review is given of the new serum treatment of skin diseases. The method consists in withdrawing blood from the patient or a healthy individual, allowing the serum to separate and injecting the serum into the patient. A variety of dermatoses have been thus treated: namely, eczema, psoriasis, dermatitis herpetiformis, chronic urticaria, prurigo, purpura, scurvy, pruritis, etc. Evidence is not as yet sufficient to say definitely whether autogenous or foreign serum is best and whether or not the serum should be inactivated.

Under the diseases of the nervous system the reviews of brain tumor and cerebral apoplexy are especially worthy of mention. Bullock's experimental production of multiple sclerosis in animals by subcutaneous injection of cerebrospinal fluid are very interesting, and, if confirmed, highly important.

THE CLINICS OF JOHN B. MURPHY, M.D., AT MERCY HOSPITAL, CHICAGO. Vol. III, No. 2; octavo of 213 pages, 55 illustrations. Vol. III, No. 3; octavo of 215 pages, 54 illustrations. Vol. III, No. 4; octavo of 254 pages, 65 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Published bimonthly. Price per year: Paper, \$8.00; Cloth, \$12.00.

A short time ago the reviewer was inclined to believe that the successive copies of "The Clinics" showed evidences that Dr. Murphy was gradually developing ennui, but an examination of the April, June and August numbers has dispelled this illusion—the August number is decidedly the best of the three.

The April number opens with a clinical talk on surgical and general diagnosis which includes three topics: empyema, the examination and analysis of cases, and the Abderhalden test in tubal pregnancy. The other topics as presented in this number are not particularly noteworthy, although Dr. Mix's discussions on the medical phases of cases of acute pancreatic cyst, duodenal ulcer and amputation neuroma are interesting.

The clinical talks cover sixty-three pages in the June number, and in them Dr. Murphy handles a variety of subjects in an instructive manner. The leading articles deal with the subjects of tenoplasty and neuroplasty and should be read by everyone who is at all interested in these topics. In speaking of the free transplantation of tissue flaps Murphy gives credit to Lexar for originating this procedure. It is true that Lexar was the first to transplant large grafts of fat, but to Kirchner must be given the credit for having developed the subject of fascia transplantation. It is to be regretted that in connection with the newer surgical procedures Dr. Murphy has so rarely seen fit to mention the name of the originator of the method which he is following.

Of all the articles that have appeared in "The Clinics" the talk on ileus, that starts the August number, is probably the most valuable. The clinic on arthroplasty of the hip was held before the foreign members of the International Surgical Congress and

gives in detail a description of Murphy's technique and a demonstration of cases. Fourteen other clinics are included in the August number.

GUIDING PRINCIPLES IN SURGICAL PRACTICE. By Frederick-Emil Neef, B.S., M.L., M.D., Adjunct Professor of Gynecology, Fordham University School of Medicine, New York City. Sextodecimo, 180 pages. Surgery Publishing Co., New York. Price: Cloth, \$1.50.

This monograph presents the author's views regarding the guiding principles of surgical practice in an interesting manner. The teachings are for the most part strictly orthodox and the book can be read with profit by both the general practitioner and the surgeon. The most noteworthy features of the book are the index, which covers twelve pages of fine print, and the unusually fine mechanical style. Marginal headings in contrasting ink are presented throughout.

THE PRACTICAL MEDICINE SERIES, comprising ten volumes on the year's progress in medicine and surgery. Under the general editorial charge of Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School; Roger T. Vaughan, Ph.B., M.D. Volume II, General Surgery. Edited by John B. Murphy, M.D. Series, 1914. Chicago: The Year Book Publishers, 327 South La Salle Street.

This volume, like the others of the series, is intended primarily for the general practitioner but the specialist in surgery will also find it of value as a reference book. Dr. Murphy has covered an enormous amount of literature in preparing this review. Of course, one might differ with him as to the value of many of the articles which he includes in his review as compared with those which he has ignored. It is of interest to note that of all the illustrations which have appeared in the surgical literature of the past year Dr. Murphy has seen fit to reproduce but few aside from those which illuminated his own articles and those which originated in the Mayo clinic.

PRINCIPLES OF SURGERY. By W. A. Bryan, A.M., M.D., Professor of Surgery and Clinical Surgery at Vanderbilt University, Nashville, Tenn. Octavo of 677 pages with 224 original illustrations. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$4.00 net.

In many respects the author has fulfilled his purpose as expressed in the preface of his work, in that he puts forth in this volume a broad statement of primal facts which should be a part of the knowledge of not only every surgeon, but physicians and students about to enter the practice of medicine.

The preliminary chapter on Surgical Bacteria, embracing as it does the discussion of the protective powers of the human organism, is both timely and up to date. The period has arrived in immunological studies where it is just as important for the physician to know what not to do as what to do in order to achieve the best results in the case at hand.

The next chapter, on Asepsis and Antisepsis, is concise, but at the same time very satisfactory, and it is refreshing to find a text-book which so clearly puts before the profession the fetish of many of our antiseptics. Of the list discussed the author gives the highest place in antiseptic value to Harrington's solution and we believe justly so.

The other chapters of the work are equally interesting and instructive. The author is a firm believer in the non-surgical treatment of so-called surgical tuber-

culosis and accords a high place to the use of tuberculin when controlled by competent hands.

Exception should be taken to the author's statement that syphilis rarely attacks the spinal cord. What he probably means to say is that syphilitic gummata are not common in the spinal cord, for we know that that ubiquitous disease, locomotor ataxia, has a specific origin in practically 100 per cent. of the cases. We regret also to note the absence of any reference to the excellent results obtained in this disease by the use of salvarsanized autoserum therapy.

The latter part of the work is concerned with a very creditable discussion of the various benign and malignant tumors, considered in a very general yet concise way.

ANOCI-ASSOCIATION. By George W. Crile, M.D., Professor of Surgery, School of Medicine, Western Reserve University, Cleveland, and William E. Lower, M.D., Associate Professor of Genito-Urinary Surgery, School of Medicine, Western Reserve University, Cleveland. Octavo of 259 pages, with original illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$3.00 net.

Every adequate stimulus awakens an otogenetic or phylogenetic memory or association. These associations may be of benefit to the individual—hence bene-associations; or they may be injurious to the individual—hence noci-associations. All of life is an attempt to develop an environment which shall, as far as possible, be free from noci-associations—that is to reach a stage of anoci-association. No matter what one's personal opinion on the subject may be he must admit that in these 259 pages Crile and Lower have developed highly interesting theories and have apparently proved the value of their technic of anoci-association.

The first part of the book describes in detail Crile's well-known kinetic theory of shock; shock, according to Crile, being the result of excessive conversion of potential into kinetic energy. In other words, shock is exhaustion. Its histopathology shows a hyperchromatic stage followed by a hypochromatic stage in the cells of the brain, liver and adrenals. This part of the book contains a number of beautiful plates illustrating these histologic changes. Crile maintains that inhalation anesthesia offers no bar to noci-associations from reaching the brain and activating the kinetic system. He believes that with ether anesthesia "the afferent stimuli reach and modify the brain-cells as readily as if no anesthetic had been given."

Part two is devoted to the treatment of shock and its prevention through anoci-association. Crile and Lower aim to avoid the occurrence of shock; "by an assuring preoperative environment; by the definite dulling of the nerves through the administration of a narcotic (morphin, 1/6 gr., scopolamin, 1/150 gr.); by a non-suffocating odorless inhalation anesthetic (nitrous oxid-oxygen); by a local anesthetic to cut off afferent impulses during the course of the operation (novocain); by a second local anesthetic of lasting effect to protect the patient during the painful post-operative hours (quinin and urea hydrochlorid); by gentle manipulation and sharp dissection—by the combination of all these methods."

The book contains a valuable chapter on the technic of administering nitrous oxid-oxygen anesthesia by Agatha Hodgkins and the description of a hospital plant for the manufacture of nitrous oxid by Dr. A. R. Warner.

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THE JOURNAL

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ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

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SPECIAL ARTICLE

THE TEACHING OF NEUROLOGY AND PSYCHIATRY IN INDIANA

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Professor Nervous and Mental Diseases, Indiana University School of Medicine

INDIANAPOLIS

Medical educators all over the country appear to realize that nervous and mental diseases have been, and are still being, inadequately taught in almost all of our best medical schools, and practically wholly disregarded in schools of second and third rank. A careful perusal of the curricula of the various medical colleges reveals this beyond much doubt, through unquestionably some neurology and psychiatry is taught as a part of internal medicine, of which they are an intrinsic part. However, no course in medicine can be considered complete and well-balanced without according to diseases of the nervous system and to affections of organs which manifest symptom-complexes chiefly neurologic and psychic, separate and profound attention.

The ideal practical course of teaching of neurology and psychiatry, as mapped out by the committee on Education of the American Medical College Association and the American Medical Association, if strictly adhered to, might go far toward inculcating a general working knowledge of these subjects in our medical students, but the limit of this course, as outlined by the above mentioned authorities, is not only *not* given by most of our medical schools, but even when fully lived up to, does not measure the standard of proportion, which the importance and dignity of these subjects demand.

In European, and especially the German, universities, there have been established for decades

special psychopathic departments, usually in separate divisions of hospitals, in which daily clinical demonstrations are given, just as in other departments of medicine and surgery. In other words, psychiatry has long been recognized as an intrinsic part of the medical course. As a rule the chair of psychiatry is distinct from that of neurology. The two are regarded as correlated only, and each as correlated to medicine as a whole, as they should be.

In this country there has been a noticeable tendency to consider both the teaching of neurology and psychiatry as special branches, rather than as intrinsic basic parts of internal medicine, a thorough knowledge of which goes very far indeed toward solving some of the most intricate and difficult problems of internal disease, both organic and functional—so-called. It can most truly be said that the greatest clinicians the world knows, or has ever known, had thorough knowledge of the physiology, normal and abnormal, of the nervous system as a whole and of its close relations to the physical-mental organism. In fact, these same clinicians, who considered themselves as diagnosticians and internists, were often regarded by others, both fellow-physicians and laymen, as neurologists or psychiatrists or both, much to their disgust. To-day, all neurologists and psychiatrists of note, are, strictly speaking, general diagnosticians, for they fully realize that all affections of the nervous system, whether accompanied by abnormal mental states or not, are problems of internal medicine, and oftentimes surgery. Every teacher of neurology and psychiatry emphasizes the importance of a clear understanding of this close relationship and constantly indicates the application of the principles of neurologic diagnostic and the clarifying power they bring into obscure problems of non-nervous origin. In this effort and direction neurologic and psychiatric instruction should continue to advance, for

it is obviously impossible to attain anything like a well-rounded medical education without pretty thorough knowledge of the gross, and to a somewhat lesser degree the finer, structures of the nervous system, the relation of its parts to each other and to the organism as a whole, its physiology, the principles underlying its normal manifestations and the mechanism whereby normal phenomena, physical and mental, are brought into play.

It must be obvious to the thoughtful student that adequate instruction in nervous and mental diseases must be preceded by adequate teaching of the anatomy, histology and physiology of the nervous system, for only through the application of normal phenomena can any deviations from the normal be established and their significance in any given case be comprehended. To attempt instruction of the symptoms and meaning of abnormal conditions, or to try to convey a correct interpretation of positive and negative signs elicited in physical and mental examination, either in the polyclinic or at the bedside, without previous knowledge of what the normal reactions would be under like circumstances, is clearly putting the cart before the horse.

The importance of pretty complete understanding of normal neuro-anatomy and neuro-physiology in neuro-psycho-diagnosis is emphasized by the fact that methods of examination sufficient to ascertain the existence of abnormal conditions outside the nervous system, are insufficient when applied to neurologic cases. It requires very much more and refined effort on the part of the physician to arrive at a satisfactory and correct diagnosis of an abnormal status of the nervous system. Nowhere in the realm of medical science does precision and time-taking care in the patient's examination count for so much. Nowhere else does the intimate history of the individual, his family antecedents, his present family environment, his previous and present mode of life, his personal and familial habits, his normal behavior and conduct; the manner of onset of the disease, its abruptness, subacuteness or chronicity in progress, the clinical sequence of symptoms, the deviation from normal reactions, the indications of and for focal lesions, the careful weighing in the balance between positive and negative symptomatology, mean so much in the determination and interpretation of the condition at issue. The most careful history taking, most painstaking physical examination, not only of the nervous

system, but of *all* organs, the most minute inquiry and study of the blood, the secretions, excretions and the spinal fluid, the functionation of the ductless glands, and, finally, the careful *intensive* study of the individual patient as an individual entity manifesting normal or abnormal adaptation to his environment, whatever that may happen to be, all are necessary and essential factors in establishing an etiologic-pathologic diagnosis.

Doubtless, everyone who knows anything about such matters at all will be willing to admit the difficulties encountered in neuro-diagnosis and neuro-therapy, for these have long been recognized. We will admit that every medical school has not the facilities nor the men to meet the question of adequate teaching of psychiatry and neurology, especially the former, squarely and fairly. The demand of high standards in medical education in all that spells completeness and thoroughness has now brought this issue to the front. Adequate teaching of neurology and psychiatry in our medical schools has now become an important, vital question. Let us see how well or how poorly Indiana has faced and met this question.

Ross Moore of Los Angeles, speaking on the subject "The Present Teaching of Psychiatry in American Medical Schools," reproduced in *The Journal of the A. M. A.*, Nov. 7, 1914, p. 1643, made statements anent the courses on psychiatry held by the Indiana University School of Medicine, at the Central Indiana Hospital for the Insane, which require refutation. He says: "Indiana University leads all other American medical schools in number of hours given to the subject. In analyzing the course in this institution the impression is obtained that it is more a collection of a number of isolated series of lectures and clinics than a well-thought-out whole."

We believe Dr. Moore entirely in error in his conclusion, based, we presume, upon insufficient knowledge as to the character, scope, development and manner of teaching in the courses to which he refers. We should not permit assertions conveying such erroneous impressions to pass unchallenged. We, therefore, place before the profession for its own judgment, the published program of the full course on psychiatry with that on neuro-pathology and neuro-anatomy for the current year, with a discussion of the evolution and development of neurologic and psychiatric education in this state.

COURSE IN MENTAL AND NERVOUS DISEASES
(Section 1)

SENIOR CLASS, 1914

October 6th, 1:30 p. m.:

Pathology of the Brain and Meninges in Infectious Diseases, Dr. Potter.

Infection Psychoses: (1) fever delirium; (2) infection delirium; (3) postinfection delirium. (Illustrative cases.) Psychoses of Exhaustion: (1) collapse delirium; (2) acute confusional (amentia); (3) acquired neurasthenia. (Illustrative cases.), Professor Sterne.

October 13th, 1:30 p. m.:

Pathology of Toxic Insanities, Dr. Potter.

Intoxications: (1) acute intoxications; (2) chronic intoxications: (a) alcoholism (intolerance of alcohol, pathological intoxications, chronic alcoholism, alcoholic deterioration, delirium tremens, Korsakoff's psychosis, alcoholic hallucinosis, acute and subacute forms, systematized delirium, alcoholic paranoia, alcoholic pseudoparesis, delusions of jealousy); (b) morphinism; (c) cocaineism, etc. (Illustrative cases.) Thyroigenous insanity: (1) myxoedematous insanity; (2) cretinism. (Illustrative cases.), Professor Hutchins.

October 20th, 1:30 p. m.:

Pathology of Dementia Praecox, Dr. Potter.

Dementia Praecox: hebephrenic, catatonic and paranoid forms (illustrative cases), Professor Sterne.

October 27th, 1:30 p. m.:

Pathology of Dementia Paralytica, Dr. Potter.

Dementia Paralytica (illustrative cases), Professor Hutchins.

November 3d, 1:30 p. m.:

Pathology of Dementia Paralytica (continued), Dr. Potter.

Dementia Paralytica (continued) (illustrative cases), Professor Sterne.

November 10th, 1:30 p. m.:

Pathology of Gross Brain Lesions: (1) arteriosclerosis; (2) abscess; (3) atrophy; (4) traumatism; (5) brain tumor; (6) hemorrhage; (7) softening; (8) syphilis, Dr. Potter.

Insanity with Gross Cerebrospinal Lesions (cortical gliosis, diffuse sclerosis, chorea, multiple sclerosis, syphilis, tabetic psychoses, arteriosclerotic atrophy, circumscribed embolism, atrophies and traumatic disorders) (illustrative cases), Professor Hutchins.

November 17th, 1:30 p. m.:

Pathology of Gross Brain Lesions (continued), Dr. Potter.

Insanity with Gross Cerebrospinal Lesions (continued) (illustrative cases), Professor Sterne.

November 24th, 1:30 p. m.:

Pathology of Presenile and Senile Psychoses, Dr. Potter.

Psychoses of the Period of Involution: (a) melancholia (simple and hypochondriacal forms, depressive delusional states, anxious melancholia); (b) presenile persecutory delusional states; (c) senile dementia (presbyophrenia, depressions, delirium, paranoid states) (illustrative cases), Professor Hutchins.

December 1st, 1:30 p. m.:

Pathology of the Manic-Depressive Insanities (Mania and Melancholia), Dr. Potter.

Manic-Depressive Insanity: (a) manic and delirious states; (b) depressive and stuporous states; (c) mixed conditions (illustrative cases), Professor Sterne.

December 8th, 1:30 p. m.:

Pathology of Spinal System Diseases: (1) tabes dorsalis; (2) syphilitic meningitis; (3) multiple sclerosis; (4) lateral sclerosis; (5) combined sclerosis, Dr. Potter.

Paranoia (of persecution, of grandeur, erotic and hallucinatory forms, original paranoia and paranoia of querulants) (illustrative cases), Professor Hutchins.

December 15th, 1:30 p. m.:

Pathology of Spinal System Diseases (continued): (1) hereditary ataxia; (2) progressive muscular atrophy; (3) amyotrophic lateral sclerosis; (4) syringomyelia; (5) hypertrophic cervical pachymeningitis, Dr. Potter.

Psychogenous Neuroses: (a) hysterical insanity (hypochondriacal disorders, change of character, dream states and deliria, moods and states of agitation); (b) traumatic neuroses; (c) neuroses of fright (phobias) (illustrative cases), Professor Sterne.

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January 12th, 1:30 p. m.:

Pathology of Spinal System Diseases (continued): (1) acute epidemic poliomyelitis; (2) subacute and chronic poliomyelitis, Dr. Potter.

Original and Constitutional Conditions: (1) nervousness (including congenital neurasthenia); (2) constitutional depression; (3) constitutional excitement; (4) compulsive insanity; (5) impulsive insanity; (6) sexual psychopathia (illustrative cases), Professor Hutchins.

January 19th, 1:30 p. m.:

Pathology of Spinal System Diseases (continued): (1) myelitis; (2) neuritis and multiple neuritis; (3) bulbar palsy, Dr. Potter.

Psychopathic Personalities: (1) born criminal and moral insanity; (2) the unstable (pseudodipsomania and habitual criminal); (3) morbid liars and frauds; (4) pseudoquerulants (illustrative cases), Professor Sterne.

January 26th, 1:30 p. m.:

Pathology of Constitutional Inferiority (Idiocy and Imbecility), Dr. Potter.

States of Deficient Development: (1) imbecility; (2) idiocy (illustrative cases); (3) epileptic insanity (dementia, periodical moods, delusional states, states of obscuration, stupor, anxious delirium and dipsomania) (illustrative cases), Professor Hutchins.

February 2d, 1:30 p. m.:

Pathology of Epileptic Insanities, Dr. Potter.

Treatment of Insanity. General management and Care of the Insane. General Psychiatric Clinic, Professor Sterne.

February 9th, 1:30 p. m.:

General Review of Pathology of the Nervous System, Dr. Potter.

General Psychiatric Clinic, Professor Hutchins.

COURSE IN MENTAL PATHOLOGY

(Section 2)

JUNIOR CLASS, 1915

February 20th, 2 p. m.:

The Conception of Mental Unsoundness. The Insane and the Semi-Insane, Professor Lindley.

Cases Demonstrating the More Pronounced Psychopathological and also Borderland States, Dr. Bahr.

February 24th, 1:30-3:30 p. m.:

Embryology of the Nervous System. Anatomy of the Spinal Cord, Dr. Potter.

February 27th, 2 p. m.:

The Nervous System and Consciousness. The Three Level Theory of Hughlings Jackson. Mental Disorders as Distinguished from Nervous Disorders. The Distinction of Functional and Organic Disorders, Professor Lindley.

Cases Demonstrating Various Types of Gross Organic Lesions of the Brain and Nervous System, Dr. Bahr.

March 3d, 1:30-3:30 p.m.:

(1) Blood Supply of the Central Nervous System. (2) Anatomy of the Pons, Medulla and Cerebellum. (3) Ventricles of the Brain. With demonstration of specimens, Dr. Potter.

March 6th, 2 p. m.:

The Causes of Mental Unsoundness. Heredity. The law of Mendel in relation to insanity, Professor Lindley.

Cases and Pedigree Charts Demonstrating the Mendelian Laws of Heredity. Cases Showing Congenital Mental and Physical Defective Development, Dr. Bahr.

March 10th, 1:30-3:30 p.m.:

(1) Anatomy of Mid- and Interbrain. (2) Anatomy of Cerebrum. With demonstration of specimens, Dr. Potter.

March 13th, 2 p. m.:

The Causes of Mental Unsoundness. Varieties of Stress, Internal and External, Professor Lindley.

Cases Demonstrating Various Exciting Causes, as Shock, Fright, Syphilis, Hemorrhage, Alcoholism, Morphine, Senility, Traumatism, Puberty, Climate, etc., Dr. Bahr.

March 17th, 1:30-3:30 p.m.:

(1) Origin and Distribution of the Cranial Nerves. (2) Cerebral Localization. With demonstration of specimens, Dr. Potter.

March 20th, 2 p.m.

The Fundamental Forms of Insanity, Professor Lindley.

Cases Demonstrating Psychopathological States as the Result of Neuropathic or Psychopathic make-up of the Individual, and Fundamental Forms of Insanity, Dr. Bahr.

March 24th, 1:30-3:30 p. m.:

(1) Spinal Localization. (2) Association and Projection Fibers of the Brain and Cord. With demonstration of specimens, Dr. Potter.

March 27th, 2 p. m.:

Disorders of the Stream of Consciousness. Retardation, Disassociation, Repression, Altered Threshold, Paralysis, Dream-Consciousness, etc., Professor Lindley.

Cases Demonstrating Disturbances in the Stream of Consciousness: (1) disturbances in attention: (a) aprosexia; (b) hyperprosexia; (2) disturbances in rapidity of stream of consciousness: (a) pathological retardation; (b) pathological acceleration; (3) disturbances in continuity of the stream of consciousness; (4) compulsory concepts, Dr. Bahr.

March 31st, 1:30-3:30 p. m.:

Technic for Macroscopic and Microscopic Study of Cerebrospinal Diseases, Dr. Potter.

April 3d, 2 p. m.

Disorders of the Stream of Consciousness. Disturbances of Feelings and Emotions. The Affective Basis of Delusions, Anomalies of Self-Consciousness, etc., Professor Lindley.

Cases Demonstrating Disturbances in the Emotions: (1) pathological sadness or depression; (2) pathological exaltation or hyperthymia; (3) pathological irritability; (4) pathological apathy; (5) pathological alterability of the feeling tones or moods; (6) pathological increase of the emotional excitability, Dr. Bahr.

April 7th, 1:30-3:30 p. m.:

Laboratory period, Dr. Potter.

April 10th, 2 p. m.:

Disorders of the Stream of Consciousness. The Disturbances of Impulse and Volition, Professor Lindley.

Cases Demonstrating Disturbances of Volition and Action, Dr. Bahr.

April 14th, 1:30-3:30 p. m.:

Laboratory period, Dr. Potter.

April 17th, 2 p. m.:

Disorders of the Stream of Consciousness. Disturbances of Association, Memory, Imagination, etc., Professor Lindley.

Cases Demonstrating Disturbances of Association, Content, Delusions, Disturbances of Memory, Orientation, Clouding of Consciousness, Dr. Bahr.

April 21st, 1:30-3:30 p. m.:

Laboratory period, Dr. Potter.

April 24th, 2 p. m.

Disorders of the Stream of Consciousness. Disturbances of Sensation, conception and Judgment. Illusions, Hallucinations, Pseudohallucinations, etc., Professor Lindley.

Cases Demonstrating Disturbances in (1) Sensation: (a) anesthesia; (b) hypesthesia; (c) hyperesthesia; (d) analgesia; (e) hypalgesia; (f) hyperalgesia. (2) Perception: (a) hallucinations; (b) illusions; (c) pseudohallucinations, etc. (3) Judgment, Dr. Bahr.

April 28th, 1:30-3:30 p. m.:

Laboratory period. Demonstration of Cell Changes, Dr. Potter.

May 1st, 2 p. m.:

The Analysis of Morbid Personalities. The Conception of Conscious Attitudes. The Role of the Subconscious, etc., Professor Lindley.

Cases Demonstrating Morbid Personalities, Suppressed Emotions, Suppressed Consciousness and Amnesic States. Somatic Symptoms Accompanying Psychopathological States, Dr. Bahr.

Commenting upon the above program we wish to call attention to some important features thereof. It will be noted that it, in reality, embraces several distinct courses, which, when taught at all in other medical schools, are usually held separately, but which we believe are so intimately correlated that they should be, as much as possible, kept in a large unit. Associated with each clinical period in the advanced course for senior students is the review course on neuropathology, which together with the case presentations, analyses and discussion is allotted an entire afternoon weekly for sixteen weeks, a total of about sixty hours. The course on mental pathology and psychology for the junior class is associated with an elaborate course on neuro-anatomy, the two embracing twenty-one periods, approximately fifty hours.

Both clinical years are, therefore, trained in psychiatry and fundamental neurology. In addition to the above, the bedside teaching in the neurologic and psychopathic department of the City Hospital and College Polyclinic—a total of 108 hours—is regularly conducted throughout the senior year, bringing the student into closer personal touch with patients and giving him opportunity to educate himself, under careful supervision, in the finer art of neuro- and psychodiagnosis in a practical way. The curriculum also demands for junior students a thirty-six-hour course in neurology and for second-year students practical laboratory courses in neuro-anatomy and neuro-physiology in preparation for the more serious work of the advanced clinical courses. It will be seen therefore, that, while the bulk of neurologic and psychiatric study falls into the two clinical years, as it properly should, preliminary training for these branches is given in the pre-clinical sessions.

Of the development of neurologic and psychiatric teaching in Indiana, the writer can speak from personal knowledge only of the last twenty years, during which time he has been constantly and actively engaged in medical teaching, first in the Central College of the Physicians and Surgeons, later in the Medical School of Purdue University and, after the coalition of all medical colleges in the state, in the Indiana University School of Medicine, in each of which schools he has held the chair of neurology and psychiatry. During these two decades of active teaching, the development of these branches of internal medicine has been consistent and in many ways phenomenal, far out-stripping the sister

branches in important advance, not only in exactness of diagnosis, therapy and prognosis, but also in exactness of scientific detail. During this period, the evolution of neurology and psychiatry from their former largely speculative character may be said to have occurred. This is particularly true as it relates to psychiatry, which had previously been shrouded more or less by meta-physical psychology. Considerably prior to twenty years ago, most of the important anatomical and physiological neurologic data had been established, and neuro-pathology had been placed upon a firm basis through painstaking laboratory research. But a thorough knowledge of these subjects was the possession of a chosen few, who had devoted time and study to them. The intricacies of the nervous system, normal and pathologic, were, and for many years later remained, practically a closed book to the rank and file of the medical profession. To-day, every senior in a first class medical school knows more essential facts and theories in the field of neuro-anatomy, neuro-physiology and neuro-pathology making neuro-diagnosis possible, than most of the experienced medicos of twenty years ago, at least in America. At that time, so far as the writer knows, not a single medical school in this country gave a systematized course in these subjects, such as would to-day be deemed anything like adequate. Not a single laboratory for systematic neurologic study existed in the United States, and there were only a few connected with European universities, to which those desirous of making a special study and gaining a thorough training in these branches naturally migrated. To-day every high-grade medical school offers at least some facilities for this work, but even now many schools fail in teaching the fundamental necessary systematic courses in neuro-anatomy, physiology and pathology, relying almost wholly upon clinical teaching to offset this deficiency—which it can never do altogether. Indiana has not been guilty of this defect in her medical progress.

A bit of history upon this specific topic may here not be amiss. We do not care especially about priority—we merely wish to record facts. It matters little who taught the first course, the first real systematically defined course, nor what medical school was sponsor for that teaching, save in so far as it bespeaks for that institution signs of development toward a higher plane and ideal of medical education.

In 1894 the writer inaugurated a systematic course of neuro-anatomy and neuro-pathology illustrated by tissue and lantern demonstrations, correlated with clinical and bedside material in the old Central College and City Hospital for junior and senior students. This course was continued and elaborated in the following years till the University of Indiana became the mother of medical education in this state. At the present time, this course, far perfected, is still given, but, as it should be, in the pre-clinical years by instructors and in laboratories equipped to render the best service—surely a sign of progress. A glance at the curriculum of the entire field of neurology and psychiatry will indicate the importance attached, at this time, to fundamental training in these branches. Year by year there has been clearly manifested a well-defined policy in our teaching to pave the way in each succeeding medical year for the higher courses to follow; first laboratory and demonstrations, then the A B C of neurologic diagnosis followed by the application of neuro-psychologic principles and their reactions in the clinic and at the bedside, special emphasis being placed upon the significance of symptoms and the modus of their presence or absence in each concrete case. Didactic lectures and abstract analysis have been replaced by clinical and bed-side work, until now only practical section work is held in neurology.

The development of psychiatric teaching is even more interesting and Indiana has the right to claim much for itself in this field. While desultory instruction in mental-pathology was occasionally given in other medical schools and hospitals prior to the date, to-wit the year 1900, at which systematic education in psychiatry was begun in Indiana, we believe we were the first to establish anything like a well-rounded clinical course of psychiatry in this country. To Dr. George T. Edenharter, superintendent of the Central Indiana Hospital for the Insane, belongs the credit of giving birth to a big idea. Actuated by the belief that such an institution as he presided over—a state hospital for the sick—should be, not merely a housing-place for acute and chronic mental invalids, but rather a central point for the dissemination of knowledge and education from which every teaching advantage should be derived, Dr. Edenharter finally brought into being a department of pathology—a separate, excellently equipped building—at the Central Hospital. From the very inception of the idea, he announced the plan that medical education in matters psychiatric and neurologic

should in that department and in that building find its opportunity. In the January number, 1897, of *The Journal of Nervous and Mental Diseases*, the writer detailed at some length the plans and equipment of this new adjunct to science and the object it sought to attain. How well Dr. Edenharter kept faith and how great a debt we owe to him, first for the noble idea he conceived, second for the opportunity he created, and third, for the splendid development of each, the writer takes this occasion to record. The systematized course on psychiatry was begun in 1900, each of the two medical schools holding separate weekly clinics of three hours duration. Later when the schools united into one, a single, more elaborate course was conducted, each year certain defects being eliminated. Last year, realizing the inter-dependence of normal applied psychology to the scientific study of mental affections, the university added a clinical psychology course to the curriculum. At the present time we believe a well-balanced, well-systematized series of clinical demonstrations is being given, which while not perfect, is of high standard. It has not reached its present proportions as a hap-hazard growth, but has been carefully thought-out and developed to meet, what we regard as the essentially necessary teaching of psychiatry in a class A + medical school, so that every graduate student might be able to recognize and diagnose not only well-advanced psychoses, but the infinitely more important beginning and border line signs of alienation. We have not been content merely to *exhibit* a wealth of clinical material to our students, but have endeavored to analyze and study with the students, cases of each class *intensively* and then demonstrate many similar conditions manifesting, often, different psychic pictures. Again it has been our object to give them an insight into the psychology of the various types of mental affections with practical application of anatomic, psychologic and physiologic principles to concrete, carefully-studied cases, typical and atypical, following the classification of Kraepelin. We do not claim that the teaching of psychiatry and neurology in Indiana represents perfection, by any means, but we feel that we may justly claim to have been pioneers in systematic psychiatric education and that during the fifteen years of logical, well-defined development in this field, Indiana has made a record to which she can point with pardonable pride.

Norways Sanatorium.

ORIGINAL ARTICLES

LYMPHOSARCOMA AND KINDRED DISEASES

REPORT OF A CASE

P. H. LINTHICUM, A.B., M.D.
EVANSVILLE, IND.

An interesting case of lymphosarcoma has prompted my review of that condition and the somewhat kindred diseases, pseudoleukemia and leukemia. I will attempt to show the relations of these three diseases and their gradations, so to speak, from one to the other.

There has been considerable confusion on this subject, and the distinction between these three diseases which are so interwoven in their characteristics and gradations from one to the other, has been far from clear.

In the first place, concerning leukemia, the old terms splenic, myelogenous and lymphatic have been abandoned, and Lazarus and Ehrlich have substituted the terms lymphoid and myeloid. Leukemia was formerly differentiated from leukocytosis by calling a ratio of white to red cells of 1 to 50 or 1 to 20 a leukemia. We now do not consider the numerical amount of leukocytes or the tinctorial properties of the granules. We do not consider the source of the white cells in the new classification, as we implied in the terms splenic, myelogenous and lymphatic. As a matter of fact, the spleen has little to do with the origin of white cells in adults. Even in cases of enlarged spleen, in so-called splenic leukemia, myeloid changes are found in the bone-marrow and blood and even myeloid degeneration of the spleen is present, and hence splenic leukemia is rather a myeloid leukemia.

The terms lymphoid and myeloid instead of referring, as terms in the old classification do, to the origin of white cells, refer rather to the nature of the hyperplastic tissue. Lymphoid means a systemic disease distinguished by hyperplasia of lymphoid tissue, and correspondingly the same thing is true of myeloid. Preformed lymphoid tissue exists throughout the body, and it, as well as myeloid tissue, may be developed through metaplasia in the adventitia of blood-vessels everywhere, and hence it is not by metastasis that this hyperplasia is seen throughout the body.

Lazarus and Ehrlich have classified an acute and chronic condition in each disease, and we have acute and chronic lymphoid and myeloid leukemia. Chronic lymphoid leukemia is char-

acterized by an increase of lymphocytes of 90 per cent. or more, of which the small predominate. There is rarely an increase of other leukocytes. Myelocytes are rare. Oligochromemia is characteristic, and the azure granulations usually present in normal lymphocytes are absent. Acute lymphoid leukemia is pathologically similar to chronic leukemia, the reduction of hemoglobin in red blood cells, however, being usually more evident. The lymphocytes in some cases may not be much increased or even be subnormal. Pathologic lymphocytes, forerunners of normal leukocytes, are present. These pathologic cells are larger and stain less effectively than normal lymphocytes. Clinically, the two conditions are differentiated by the acute condition, occurring more in the young, the spleen being less enlarged and there being more tendency to cutaneous hemorrhage and the course being more acute.

Chronic myeloid leukemia is characterized by presence of many leukocytes which originate in the bone-marrow, and a large, usually hard, spleen. Myelocytes or mononuclear granular cells which are never present in normal blood, are present in high percentage and are mostly neutrophilic. Myeloblasts, forerunners of myelocytes, and which resemble lymphocytes, are also present. The myeloblasts have three or more nucleoli, while the lymphocytes never more than two. The blood gives a distinct oxydase reaction due to the presence of myeloid cells.

Acute myeloid leukemia has only been recognized for a short time. Formerly all acute leukemic conditions were called lymphatic. The mononuclears found in this condition are myeloblasts, and may average 75 per cent.

Grouped under the heading lymphoid or lymphatic pseudoleukemia, are classified several diseases similar to leukemia, as far as the nature of the spleen and lymph-nodes are concerned. They are quite akin to leukemia, and we find transitional forms of true leukemia. The transition between aleukemic and leukemic conditions is acknowledged, and lymphoid leukemia and lymphoid pseudoleukemia are grouped under the term lymphomatosis. Sublymphemic, aleukemic and leukemic forms are recognized. There has been a great variability in diseases presenting a microscopic picture of lymphoid pseudoleukemia and which present a general enlargement of lymph-glands and spleen. These diseases are grouped under a class called pseudoleukemic lymphomatosis. Other conditions somewhat like lymphoma present a different picture, are similar to inflammatory granulation tissue, and have been called granulomata. Some of these granulomata present a malignant picture, and some

are found to be syphilitic and tuberculous. The clinical differential diagnosis between true pseudoleukemia and granulomatosis is difficult, as the blood-picture is not much influenced in either case.

Certain varieties of lymphosarcoma which are first localized and later form metastases, and which are similar histologically to aleukemic lymphomatosis, have been put in a separate class from it, but this should not be.

The true lymphoid pseudoleukemia includes the aleukemic and sublymphemic varieties of lymphomatosis, the chief blood characteristics being a relative lymphocytosis of about 80 per cent. of a total white count normal or slightly increased. A clear-cut distinction cannot always be made between pseudoleukemia and leukemia, since in the latter, especially the acute lymphoid leukemic type, the lymphocyte increase may be absent, and in the former may be present.

Naegli differentiates pseudoleukemia from localized lymphosarcoma by presence of neutrophilic leukocytosis and relative reduction of lymphocytes in the latter.

The granulomatosis often present considerable neutrophilic leukocytosis, sometimes an eosinophilia and a reduction of lymphocytes. I have attempted to show the gradation from true leukemia through pseudoleukemia to lymphosarcoma. In the classification above given I have followed Sahli.

Coming to lymphosarcoma, we find as regards etiology that there are two main theories: first, that it is an infectious process, and secondly, that it is a new growth. Beebe and others have done interesting work on dogs. Lymphosarcoma is seen in dogs, usually in the genital organs, and is transmissible from one to the other in coitus. Tumor cells have been transplanted from one dog to another with production of new tumors. Basford contends that the transplanted tumor is an infectious process rather than a new tumor, and that the transplanted tumor becomes necrosed and that the new growth observed is a proliferation in the surrounding cells due to irritation rather than a new tumor. Beebe, on the other hand, contends that the tumors transmitted by coitus are not infectious, but new tumors transplanted on abrasions of mucous membrane, that new tumors can be grown on an abraded surface, and that after tumor cells are killed by heat or removed by filtering and transplantation then attempted, it fails. Interesting experiments show that tumor cells transplanted beneath skin, either in salt solution or defibrinated blood with a trochar, produce an immunity in the injected animal. Tumor cells placed in

blood of susceptible animals and in blood of immune animals showed longer life in the former than in the latter. Tumor cells placed in normal serum and injected caused more new growths in injected animals than cells placed in serum of animals recovered from inoculation.

Crile transfused blood from immune animals into inoculated animals with beneficial results. Weil thinks extracts of necrotic tumors contain a very active hemolysin. Spirochetes have been found in lymphosarcoma in dogs but rarely, and are absent in the most malignant tumors. But spirochetes are also reported to have been found in lymphoid leukemia and in pseudoleukemia. The most correct view is that lymphosarcoma is a true tumor.

Lymphosarcoma is a variety of round-cell sarcoma, differing from other varieties in that its stroma is more developed and its structure similar to adenoid tissue without differentiation into medulla and cortex. The growth begins usually in preexisting adenoid tissue, as in lymph-glands in the neck, mediastinum, tonsil and testes, and spreads to surrounding tissues and forms metastatic growths via the blood-stream. The tumor becomes fixed and adherent to adjacent organs, as trachea, esophagus and blood-vessels.

The clinical diagnosis of lymphosarcoma is often difficult. The blood should always be examined and section of the gland examined. In pseudoleukemia the process is more limited to affected glands, not invading surrounding tissues, and adhesions and retrograde changes are less liable. Lymphosarcoma spreads to adjacent tissue instead of spreading first throughout the lymphatic system. Other conditions, such as tubercular glands, syphilis, simple hyperplasia and other solid tumors of the neck, must be differentiated.

I wish to report a case of lymphosarcoma in a boy about 18 years old. The family history was negative except that his grandmother died of cancer of the breast, and his father had diabetes for a long while and died later of acute nephritis following an attack of tonsillitis. The boy's habits were negative except he was a constant smoker. After an indisposition of several days with throat symptoms, he came to me complaining of swelling in the neck. I found him with considerably enlarged lymph-glands in the neck. These glands increased rapidly in size and soon became fixed and immobile. His temperature was about 101 in the afternoons. The course of the disease was very acute. His scalp and face soon became edematous, and a general brawny swelling extended about the whole neck and face. The glands of axilla and groin became

enlarged, and in fact all palpable glands became much enlarged. Considerable swelling appeared in the extremities. The face soon looked like a bag of water and all former features were erased. The chest filled up with fluid and a more horrible picture could scarcely be imagined.

Deglutition, at first difficult, due to swelling in neck, later became impossible. He could not open his mouth. The glands, at first painless, later became very painful. General weakness and exhaustion and loss of weight rapidly ensued, and death occurred in eight weeks after onset.

The blood was examined frequently and showed a slight leukocytosis, averaging 10,000. The red blood-cells fell from 4,700,000 at the onset to 3,500,000. The differential count averaged about as follows: polymorphonuclears, 68 per cent.; lymphocytes, 25 per cent.; large mononuclears, 4 per cent.; eosinophils, 3 per cent. The blood-pressure was 130 mm. during the early part of the disease. The urine was negative. A Roentgen ray of the chest showed an involvement of mediastinal glands. Von Pirquet's test was negative. Wassermann test was negative. A small gland removed from the neck on microscopic examination revealed a lymphosarcoma. The case was inoperable.

General measures to relieve pain and strengthen the patient were employed. Coley's toxins were used, but availed nothing. The toxins were given three times a week, beginning with 0.5 m. in salt solution hypodermically. A slight chill and rise of temperature followed each injection, but no improvement was seen, and the patient rapidly getting worse, died eight weeks after the onset.

ETHER—SOME EXPERIMENTS TO DETERMINE ITS INFLAMMABILITY AND EXPLODABILITY AND SOME OBSERVATIONS AS TO ITS ADMINISTRATION AND ITS EFFECTS ON THE LUNGS AND KIDNEYS*

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It is generally known that ether is very volatile and very inflammable; but as to the exact conditions under which it is set afire, the ideas are very vague. In regard to its explodability the opinions differ still more, and are still more exaggerated. This uncertainty engenders unne-

cessary apprehension and will often decide for chloroform where ether might be more safely given. Our information in regard to this important question as to when ether or its vapor will ignite or explode, appears to depend entirely on theory—on text-book teaching and hearsay.

The "National Dispensatory" says under ether: "Its vapor, mixed with a large quantity of air, if ignited, explodes with great violence. In consequence of this property and of the great density of its vapor (and the rapidity with which it volatilizes at ordinary temperatures) great care should be exercised in handling ether or manipulating with it in the vicinity of a flame."

In Shoemaker we read: "Ether is very inflammable, and its vapor, mixed with air and ignited, explodes violently. Don't forget that ether-vapor and air make an inflammable and explosive mixture, and that ether may take fire from the actual cautery as well as from a candle or other open flame or fire."

Hare states: "Ether is a very volatile, very inflammable liquid. For this reason it should never be held near a fire or light, and as its vapor is heavier than air any fire in the room should be above the patient, not below him. No flame should be held nearer to the ether than 5 feet."

In The American Text-Book of Surgery the following is found: "Ether is highly inflammable and explosive. This fact should always be borne in mind, because during an operation a lighted candle or gas-jet brought near the ether may cause a serious explosion. Ether vapor, being heavier than air, always falls; hence if a light has to be used, it should be held above the ether to avoid the danger of such an explosion. If an explosion occurs the patient's face should instantly be covered with a towel or pillow to prevent burning; the inhaler may be thrown on the floor, but never the ether can or bottle, for fear of the spilling of the ether and its catching fire."

The American Practice of Surgery says: "Ether is a very volatile and inflammable liquid and the containers should not be opened within 10 feet of an open fire."

Now what are the facts so far as can be learned by observation and experiments? When in 1907 I bought the Alexandria Hospital and was arranging an operating-room (to be heated by gas) an important and serious question arose as to whether ether could be safely administered in such a room—capacity about 1,500 cubic feet of air—and whether there was any real danger of ether or its vapor becoming ignited or of exploding. Notwithstanding the accepted teaching on the subject, I felt, from personal experience in giving or having had given many times

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ether in an operating-room with a fire in an open fire-place, or in residences in rooms with fire in base-burners—without any mishap, that I could go ahead. But I wanted to be certain, if possible, and wanted to be free of any apprehension and anxiety. In view of this I wrote a number of letters of inquiry to surgeons of large experience and to chemical laboratories, expecting thus to obtain sufficient and reliable information. However, I was very much disappointed with the replies received, none of which could give any definite personal observation or facts. Having no alternative as to the method of heating our operating-room, and not wishing to expose any patient or attendants to even any possible danger, I determined to test the matter out with the following experiments:

Experiment 1.—Poured ether in an open vessel and set it on fire. It will burn like, but is set afire more readily than alcohol or gasoline. But it cannot be set afire at a distance of 5 or 10 feet; the flame must be brought to within an inch or two of the ether can or even to the ether in an open vessel. Therefore, under ordinary circumstances—excepting the employment of the actual cautery in face, nose and throat operations, and barring accidental spilling of the fluid in very close proximity to a flame or fire, there is practically no danger of setting ether on fire.

Experiment 2.—Lighted the ether in the ordinary ether can. As already stated, the light must be brought to within an inch or two of the can or bottle. The vapor will ignite readily and will burn with a small flame, which gradually dies out unless the can or bottle is shaken (the fluid agitated) or the can or bottle laid on its side, when it will burn until consumed. After the flame disappears from the mouth of the can or bottle, it will continue to burn within the can or bottle for some time. Even with repeated shaking of the can so that the fluid blazed all over the exterior of the can and the surroundings, and with rolling the can, etc., could I succeed in exploding the contents. Therefore, should under exceptional or accidental circumstances a can of ether become ignited, don't get excited and throw it on the floor or in a stove or attempt to throw it outside—as in either event you are likely to widely scatter the burning liquid and thus set fire to the contents of the room or to the patient and attendants present, but simply blow out the flame or extinguish it by shutting off the air.

Experiment 3.—Being unable to explode ether in the ordinary ether can, I thought perhaps I might succeed with it in a glass container, and as ether is sometimes given with a bottle, experiment two was repeated with first a narrow, then

with a wide-mouthed bottle, with the same negative results.

Experiment 4.—Repeated two and three, first with a washtub over the burning ether can, and then over the open ether can and a lighted candle, the object being to confine the vapor and thus favor its being lighted and exploded if such a thing is possible. Results negative although the flame was only separated 3 inches from the opening of the can.

Experiment 5.—Poured 1 pound of ether on a mask on a stand in the operating-room—somewhat more rapidly than is done in a regular anesthesia—with a gas fire in an open stove at distances ranging from 5 feet to within 18 inches of the stove and under ordinary room temperature and conditions. Results negative.

Experiment 6.—Repeated five with the room closed tight (including transom and stove-pipe damper) and the room temperature kept at 90 F. Nothing happened—and I felt greatly relieved.

Therefore, it can be safely concluded from the foregoing and from our experience of the last six years, that the administration of ether under ordinary circumstances (in a room with at least some ventilation, with the light well above the level of the patient and the ether, and the light or fire at least a foot or two away from the head of the patient and the ether) is safe, that its probable or even possible dangers have been greatly exaggerated—in fact I have been unable to bring about an explosion. By this I do not mean that ordinary care and precautions should be neglected, that unnecessary chances should be taken and the patient subjected to even possible dangers.

When the secretary of this society invited me to read a paper before you, I thought of this subject and promised to present it to you and the medical profession at large, so that others may benefit from these experiments—the physician by having his fears and apprehensions allayed, the patient by getting the benefit of the safer ether narcosis under circumstances generally deemed inadvisable or unsafe. Before writing this paper, however, I repeated experiments one, two, three and four with the same negative results. I also wrote to four of our largest chemical and pharmaceutical houses with the hope of possibly obtaining some further information on the subject. One stated: "There is no question but that there is danger in opening and handling ether in a room heated by a stove, and while one might be able to avoid a mishap for a long time, if not indefinitely, extraordinary care should be exercised when the cans are opened near a flame of any kind. The vapors of ether are light and ascend very rapidly to the upper portion of a

room, and as ordinary fires are usually near the floor that might minimize the danger to quite an extent." The latter is of course a mistake, the vapors of ether descend instead of ascend.

Another wrote: "Owing to the fact (?) that the vapors of ether are light, they naturally ascend, consequently there would be more danger of an accident from a burning gas-jet than from the fire of a stove." This again is a mistake.

The third brought out one new point when it stated "that the inflammability of ether is entirely analagous to that of petroleum ether (gasoline), namely, its low flashpoint. By flashpoint we mean that its vapor with an admixture of air is readily inflammable. Theoretically, there is here an intimate mixture of the substance with the necessary oxygen for its instantaneous and complete combustion."

The last and most practical reply was received from Parke, Davis & Co., under date of March 7, 1913, and its conclusions corroborate and substantiate my findings: "Ether, in liquid form, will take fire very quickly when brought in contact with the minutest flame of any kind. It is also true that when ether vapors and air are mixed in just the right proportion, that the vapors will burn almost instantly, and in this process so much heat is produced that the resulting expansion of air produces what is ordinarily known as an explosion. The mixture of ether and air which is most favorable for explosion is that in which sufficient oxygen is furnished to give complete combustion; the vapor must permeate every portion of the enclosed room and produce a uniform mixture. This is practically impossible in the ordinary room and with the amount of ether usually consumed. Another element of safety is the fact that ether is heavier than air and would have a tendency to sink to the floor and not uniformly mix with the atmosphere. Moreover, in the average room there is a constant change in the air, due to the currents passing under the doors and around the windows, etc. It also logically follows that just to the extent that one increases the amount of air in proportion to the ether, to just that extent increases the element of safety. In a short time the point is reached at which the ether is diluted to such an extent that it would be impossible to ignite it. From the above one can very well see that we are inclined to the belief, on the whole, that the danger from setting fire or exploding ether vapors, under ordinary conditions such as would pertain in a room during an operation, are practically nil. We have not been able to cite a single instance in medical or pharmaceutical literature in which a serious explosion has taken place. There have been a few instances of disas-

trous fires in drugstores, and particularly in factories, but in such cases the ether in liquid condition has been set on fire by direct contact with flames in some way."

In conclusion I wish to say a few words pertaining to the administration of ether and its effects on the lungs and kidneys—based on my own experience and observation. There are still advocates of chloroform anesthesia in preference to that of ether—notwithstanding the indisputable fact that it has been proved conclusively that ether is the decidedly safer of the two, and that practically all experienced operators and large clinics of the world employ ether almost exclusively in preference to chloroform. There can be no question in the mind of anyone with ordinary observation and sufficient experience in the administration of both agents, which of the two is the safer and the best for most cases, which possesses the greater margin of safety. Personally, I have seen several deaths from chloroform narcosis and a number of "near deaths" or very dangerous conditions, but have never seen a death from ether nor even any serious accompanying condition where the anesthetizer used reasonable care and diligence. Why then do so many practitioners dislike to give ether and are partial toward chloroform? Principally because they are either afraid of ether, or have had no or very little experience with it and are not willing to devote sufficient time to the subject to learn to give ether properly, or do not care to give it because it requires more exertion on the part of the anesthetizer. What is to be expected when many practitioners do not know how to test the lid reflex, cannot interpret the condition of the pupil nor test its reaction to light, do not recognize when the patient is getting too much and are unable to promptly institute the simplest measures for relief? It is general observation that comparatively few general practitioners give the important matter of anesthesia the thought and attention it deserves.

Administration.—It is not in the scope of this paper to cover this in detail—as it may be looked up in any text-book. I only want to emphasize a few points that have come under my observation and what is said here also, to a large extent, applies to the administration of chloroform and ether in its various combinations and modifications.

1. Before any anesthetic is given the patient should be properly prepared if there is time for such preparation. In most cases it will be advisable or desirable to give a preliminary dose of morphin and atropin; morphin and scopolamin or morphin and hyoscin, either a single dose one-half to two hours before, or two doses an hour or

hour and a half apart. We have used all three in sufficient cases to conclude that there is no great difference between them. I believe, however, that morphin and scopolamin controls the vomiting better. Children are very susceptible to scopolamin. These agents allay undue excitement and fear, the patient goes under the anesthetic more readily and less anesthetic is required; there is less or no mucus to bother, less or no vomiting, less shock and excitement afterward and they practically do not interfere with the secretions or bowels. Their objection is rather theoretical and on the whole their employment is to be recommended.

2. Have on hand sufficient anesthetic (sometimes more is required than expected), a suitable mask (an ordinary chloroform inhaler will do provided extra gauze is applied in case of ether and its combinations, with a towel or gauze to help to exclude the air around the mask), a mouth-gag and tongue-forceps (they may be needed just when not at hand), gauze pledgets and suitable forceps, vaseline to protect the skin—especially in ladies, strip of gauze or napkin for the eyes, restraining straps and bandage, hypodermic syringe (ready for use) with the regular supply of tablets, and in addition thereto, whisky, spirits of ammonia aromatic, camphor oil, adrenalin and oxygen; last but not least, an infusion outfit (ready for use) and normal salt solution, pus basin and towels, also a stomach tube.

3. In regard to the position of the patient, this of course is mainly determined by the operation. Generally speaking when ether is given without atropin, scopolamin or hyoscin, the head and shoulders when possible should lie level with the face turned to either side to facilitate the escape of mucus; this is frequently neglected. The jaw as a rule should be supported. As a routine the patient should be anesthetized on the operating-table.

4. Before beginning with the anesthetic the confidence of the patient should be secured; this is of more importance than is generally realized; the temperature and ventilation of the room should be noted.

5. Much has been said during the last few years as to the mode of administering ether—whether by the open or closed method. Personally I do not think it makes any material difference with the experienced and careful anesthetizer. Both methods have their advantages and disadvantages. However, with the average anesthetizer and beginner the open or drop method is the safer and preferable method. The closed method is inapplicable to the various combinations of ether. In operations about the face,

nose, throat, etc., a vaporizing outfit with inhaling tube is a great convenience and facilitates matters. The danger of the actual cautery coming in contact with the ether vapors must not be forgotten here. Professor von Eiselsberg reported an instance of serious burning of the face and I witnessed the ignition of ether vapors coming from the nostrils in connection with a rhinoplasty operation which I performed; however no injury was done. In these operations the desirability of administering the ether per rectum may be considered.

For some time we have vaporized the ether or its combinations with the aid of a small compressed air tank, using a nebulizer mask for general use and an inhaling tube in operations about the face, nose and throat, etc. This, for ordinary hospital use, is the best, safest and most convenient method we have yet employed—owing to the fact that the amount of ether can be regulated to a nicety, the flow of ether is absolutely steady (uninterrupted), hence there is no drowning or sudden overwhelming of the patient; there is less irritation; considerable less anesthetic is required and the anesthetizer's attention is not occupied by dropping, pumping, treading, etc.

6. As to the advisability of combining ether with chloroform much has been written. It is an undisputed fact that ether alone is safer than in combination; it is also a fact, I think, that ether and chloroform in combination, or with alcohol in addition (as in the A. C. E. mixtures) or with petroleum ether (as in the Schleieh's mixtures) is considerably safer than chloroform alone. We very seldom use any chloroform outside of obstetric practice. As a rule we begin anesthesia with the A. C. E. mixture and continue with it so long as the patient does well; otherwise ether is substituted. I have given the Schleieh's combination in about twenty cases and the reason it is not used more here or elsewhere is, I believe, not the fault of the method. While it is not as safe as ether alone, it is at least as safe as the A. C. E. mixture and very much more so than chloroform alone. In my experience in the majority of cases it produced fine, quiet anesthetics. The patient goes under readily and comes out quickly, there is little or no excitement; little or no mucus or vomiting; the pulse almost invariably improves and the after-effects are practically nil. Later Schleieh has substituted ethyl chlorid for the petroleum ether; why I do not know.

7. There is perhaps nothing more provoking and less excusable than to have a patient drowned with ether, etc., while the anesthetist is watching the operation. He or she should be the first to notice any unfavorable change in the condition

of the patient and should on his own initiative institute prompt measures to safeguard the patient. There is absolutely no excuse to passively sit or stand by (as I have witnessed so often) to await developments. I believe in immediate action if the patient is not doing well. Here it should be emphasized that not one particular danger signal should be looked for, but the condition of the patient as a whole considered. Both with ether and chloroform, the pupillary reflexes are perhaps the best single guide. I think it altogether unnecessary and wrong to test the insensibility of the cornea with the finger or anything else for that matter. With ether, the respiration and color of the skin are next in importance, while with chloroform the pulse is more important. With chloroform a patient may be pulseless and still retain a good or fair color; with ether the patient may be blue and still have a good or fair pulse.

Danger to Life—Asphyxia, Shock, Etc.—Asphyxia should be met according to indication. If the cause is central (due to crowding or an overdose, etc.) the anesthetic should be withdrawn, the head lowered, artificial respiration instituted, oxygen and stimulants administered. If the condition is due to a peripheral cause (dropping back of tongue, accumulation of mucus, inspiration of foreign matter, constriction of chest, etc.) the cause should be removed and artificial respiration performed. In regard to shock, in all my experience I have never seen any untoward effect, any particular trouble from protracted anesthesia when properly administered, and, under favorable conditions. This, however, does not mean that unnecessary time should be lost on the part of the operator or anesthetizer. Shock, as a rule, is due to hemorrhage, but may also depend on the serious general condition and unfavorable surroundings of the patient or be caused by carelessness in the administration of the anesthetic. It is best met by heroic stimulation, saline infusion, artificial respiration with the head lowered and application of heat to the body.

Effects of Ether on the Lungs.—For many years, and even now to some extent, it has been taken for granted, that ether in itself is responsible for the lung complications. From the beginning of my career I have disputed this belief and have since had no reason to change my opinion. Why?

1. Because of the fact that pneumonia may follow chloroform as well as ether, as was most strikingly shown in one of my first cases while intern at the County Hospital, Chicago, in 1898. Female, was curetted under ether, followed by pneumonia. When about a month or so later a

laparotomy had to be performed, chloroform was given on account of the unpleasant previous experience. However, the operation again was followed a few days later by a most severe attack of lobar pneumonia—from which she also recovered.

2. Because I have since not had a case of pneumonia or bronchitis follow any of my operations. This favorable result I attribute to careful general care as to chilling, vomiting, covering well afterwards—in particular the shoulders of the patient—and in insisting on a prompt reaction.

3. Because the occurrence of lung complications can be satisfactorily explained by other causes (chilling, foreign matter, infection, embolism, etc.).

4. Because I have had several cases of bronchitis prior to operation in which the cough, etc., was either entirely relieved or benefited.

5. Because Gottstein, Mikulicz and others have reported as high a percentage of lung complications under local anesthesia as under general anesthesia. All of which ought to be sufficient proof.

Effects of Ether on the Kidneys.—Here again erroneous ideas have prevailed, until it was shown that chloroform not only tends to cause fatty degeneration of the heart and liver, but of the kidneys as well. The effect of ether on the kidneys is usually transient, while that of chloroform is more apt to be serious and prolonged. Dr. Eisendrath of Chicago reported that albuminuria was present in 15 per cent. of 650 cases of chloroform and in 6 per cent. of 1,500 cases of ether anesthesia, where none had been present before. Casts alone are apt to be found more frequently after ether. I have examined the urine before and after operations in most of my cases and find that either casts or albumin or both are present in about ten per cent. of the cases, where none were present before. The complication as a rule disappears within forty-eight hours. In no case have I found any permanent injury. Even in grave kidney lesions, as in chronic bright's disease, ether as compared with chloroform is the anesthetic of choice—as pointed out and practiced by the late Dr. Edebohls of New York.

The following urinary findings of a case of Bright's disease (large white kidneys) on which I performed renal decapsulation ten years ago (the patient is still alive and well), demonstrates so strikingly the comparative harmlessness of ether on even extremely diseased kidneys. Day before operation: Urine—amber, acid, 1030; total amount, 18 ounces; total solids, 594 gr.; albumin XXX (1.2 per cent. or 103.68 gr. per

day); urea, 2 per cent. or 173 gr. per day (ought to be 450 gr.); hyaline—granular, epithelial and leukocyte casts and renal epithelium. Day after operation: Urine—amber, acid, 1020; total amount, 26 ounces; total solids, 572 gr.; albumin, XXX (0.8 per cent. or 99.84 gr. per day); urea, .7 per cent. or 87 gr. per day; casts less but instead a strikingly large number of fatty renal epithelial cells. A week after operation: Urine—light, amber, acid, 1028; total amount, 15 ounces; total solids, 462 gr.; albumin, XXX (1.5 per cent. or 108 gr. per day); urea, 1.8 per cent. or 129.6 gr. per day; sediment about same except less fatty renal epithelial cells. A month after operation: Urine—light, amber, acid, 1028; total amount, 27 ounces; total solids, 831 gr.; albumin, XXX (.8 per cent. or 103.6 gr. per day); urea, 2.2 per cent. or 285 gr. per day; marked improvement in amount and character of sediment.

I have noticed no case of serious suppression of urine and attribute this to the almost routine practice of giving normal salt enemata until the secretions are well established, the bowels moved and the patient is able to take water freely by mouth.

In closing this paper I will say, with the late Dr. E. J. Mellish, "the absolutely safe anesthetic will probably never be found, as the production of unconsciousness has an element of danger associated with it, but if all physicians and surgeons could be made to realize the fact that chloroform is vastly more dangerous than ether, then chloroform would be discarded as a routine anesthetic, and used only in exceptional cases."

PRACTICAL CONSIDERATIONS OF MODERN IDEAS IN OTOLARYNGOLOGY*

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In dealing with the function of the nose, I think it best to forget it as the organ of smell and consider it as the natural air inlet, the portal of the respiratory tract and capable of spoiling the whole being.

The main function of the nose is to warm, moisten and clean the air we breathe before it reaches the pulmonary alveoli, thus relieving the other parts of the respiratory tract of this work.

Three main things occur when air enters the anterior nares. The air becomes warmed, it ex-

pands and as warm air can contain more moisture than cold air, it absorbs its moisture from the nasal cavities. It has been estimated that a quart of secretion is thrown into the nose every twenty-four hours. If the nose is not properly drained and ventilated, the excess not absorbed must be gotten rid of in one of three ways—blown from the nose, expectorated or swallowed.

When man assumed the upright position, to avoid a disturbance in the orientation of his labyrinth and eye planes, it became necessary to attach the skull at its posterior inferior aspect. The growth of the brain required a change in the configuration of the base of the skull, this being to give a larger area for the convexity of the brain.

The development of the nose, teeth and face being a retrograde change, further encroachment upon the angle at the base of the skull occurred, bringing the hard palate back close to the vertebral column. The changes in development of the nasopharynx in man deprived him of a straight peristaltic tube which cleans itself as in quadrupeds. In this angular area in man we find the most vulnerable part of the upper respiratory tract and in fact the most vulnerable point in the whole body.

This unprotected non-collapsible angle which forms the nasopharynx in man assumes particular importance because most of the diseases to which human flesh is heir are air borne diseases. The particles which carry the diseases pass through the air to the recipient. The nose is a sort of tube conveyor and the upper limit of a peristaltic action lies in the soft palate. Between the posterior choanae and the soft palate, the nasopharynx is located and because of its configuration and immovable walls serves as a sort of dumping ground for particles entering with the inspired air. It can only clean itself by the feeble action of its ciliated epithelium and the precarious flow of mucus. This tall ciliated epithelium exists only as a fringe near the nasal boundary. Most of the nasopharynx is lined with stratified squamous epithelium with a variable intermediate region of non-ciliated columnar epithelium. The walls of the nasopharynx, however, are liberally supplied with adenoid tissue, it being especially collected in the central and posterior parts of the vaults to form in sagittal ridges, the so-called Luschka's tonsil. Overdevelopment of this organ produces what we know as adenoids. When we consider with what ease bacteria lodge in this unprotected spot and developing produce disease we can realize that clinically the care of the naso-

* Read before the Indiana State Medical Association, at Lafayette, Sept. 24, 1914.

pharynx becomes of supreme and inestimable importance. All these dangers have been considered with the assumption of a normal nose. When we add the burdens of a faulty nose, all these dangers become emphasized many fold.

Much of the proper development of the growing child depends upon the proper functioning of the nose. If you compare the skull of a 3-months-old infant with that of an adult, you will be struck with the predominance of the facial bones in the latter. In the child these occupy a small part of the skull. The development of the facial bones depends primarily upon nasal breathing and is brought about largely by the pressure exerted by the tongue. Just close your mouth and notice how your tongue rests forward and upward against the hard palate. You all know how hard it is to hold down the tongue of a child with a tongue depressor.

In the child the tongue is a powerful organ and by pressure upward it widens the vault of the hard palate, thus giving a horse-shoe shape to the alveolar processes. As the teeth develop and occlude properly, they assist in the widening and developing of the alveolar processes. The septum of the nose grows downward and if the vault of the palate arches properly, it has room to develop straight in the median line and barring accidents the individual acquires a normal nose. The lowering of the arch of the palate widens the floor of the nose, thereby providing sufficient space for the turbinates and accessory sinuses. A nose thus growing properly allows free access of inspired air, the development of good respiratory powers and a well-shaped chest. This means proper oxygenation of the blood and good metabolism.

When the nose becomes obstructed the child becomes more or less of a mouth breather and proper development is prevented. In mouth breathing, the child loses the tongue pressure, the vault of the palate does not widen, it remaining narrow and high with often an anterior recess. The nose becomes cramped. The septum not having room to develop buckles up into one or the other nostril and the bony cartilaginous junction becomes the seat of the development of spurs. The teeth do not properly occlude, thus causing rapid decay and irregularities. All these interfere with the proper ventilation and drainage of the nose, predispose the child to frequent infection, lower the oxygenation powers of the blood and throw the work of warming and moistening the air upon the mouth. Often enough respiration is carried on through the

mouth and no obvious damage is done to the delicate lung tissue. It has been shown that the mouth and pharynx are capable of warming and moistening the air almost as well as the nose. It does it, however, at the expense of great effort and only for a short time. If you will sit still and imitate the rapid respirations of a man after running a race, you will find after a dozen respirations that the air becomes colder and colder upon the palate and pharynx and after fifty respirations these parts feel dry and stiff. Do the same thing with the nose and nothing of the kind takes place. You may take the nose unawares with a sudden deep inspiration which produces a sense of coldness in the pharynx but after a few such inspirations the nose adjusts itself to the added task and one no longer experiences any coldness or dryness of the pharynx. This automatic adjustability is one of the chief characteristics of the nose. A mouth breather may do well in a favorable climate but a man who breathes through a healthy nose is indifferent to the severest extremes of heat, cold and humidity.

The proper functioning of the nose becomes a great factor in the chemistry of the metabolism, both in health and disease. Biochemistry which controls metabolism under all circumstances is rapidly becoming the pathology of the future. It teaches us daily that the vital processes which are constantly occurring in the tissues and fluids of the body are deeply influenced by chemical changes and toxic products which create a perversion of physiologic function.

Ziegler states that "As we approach the question of what is the chief physiologic factor in perverted metabolism we are constrained to answer, suboxidation. When the oxidizing power of the blood is normal, when the ductless glands are actively furnishing their quota of internal secretions to stimulate this function, when the individual is in full possession of unimpeded respiratory powers and when the air which he breathes is pure, there is no *pabulum* upon which to breed disease. But when the oxygen intake is limited by respiratory obstruction, when the air is drawn from poorly ventilated rooms and when the habits are sedentary then every grain of coffee becomes a drachm of xanthin poison, every ounce of food becomes a pound of toxic proteid and every germ of disease becomes a giant of destruction." Continuing he states: "The origin of suboxidation is so complex in character that it is somewhat difficult to outline its various ramifications. Respiratory obstruction is probably the most important etiologic factor: it matters not whether it lies in en-

larged tonsils, in adenoid vegetations, in hypertrophied turbinates, sinus disease or in the intranasal congestions that accompany mouth breathing. But while we are studying these problems the collateral problems of perverted secretions in the nose and accessory sinuses are forced upon us as a part of the pathogenic whole which requires our most careful consideration." Did it ever occur to you that the nose was of such great importance?

One of the most important advances made in internal medicine during the past fifteen years is the recognition of the influence of local foci of infection on the production and course of a variety of general processes of previously uncertain etiology. The association of these foci with the different types of arthritis, cardiac disease and nephritis has been so well established that a search for foci of infection becomes of the utmost importance in the treatment of these diseases. The proportion of cases of valvular disease of uncertain origin that show foci of infection in the head, i. e., tonsils, teeth and sinuses is very large.

Curshman has been teaching for the past twenty years the relation between tonsillitis and nephritis. In *Münchener medizinische Wochenschrift* of February, 1910, Gürich and Schichold discuss the relation between bad teeth, bad tonsils and acute inflammatory rheumatism. Their results and conclusions are worthy of careful consideration. Loeb of St. Louis reported four cases of nephritis following tonsillitis. Of these four patients, two were physicians, one the daughter of a physician, and one the wife of a physician and presumably greater care was to be expected in observation than in patients not directly related to physicians, and yet there was no suspicion of the possibility of a nephritic condition until the disease was well advanced. Taylor (*Annals Surgery*, June, 1912) cites four cases of so-called metastatic infection involving parts far distant from the original focus of infection which are especially interesting.

Since 1907 the contributions of Vincent, Sougues, Albertin and Weintrand have called attention to the relation of thyroid enlargement and symptoms of hyperthyroidism associated with acute rheumatic fever. Recent case reports of Billings, Beebe and others seem to indicate that there is a type of infectious goiter with and without symptoms of exophthalmic goiter dependent upon focal infection in the jaws and tonsils. The effect of the removal of these foci of infection upon this type of goiter is indeed marvelous.

Studies made by Billings and Rosenow during the past two or three years have brought to light a number of well confirmed principles. It was found that the focal disease was usually located in the head and the condition found in the head was most frequently a chronic streptococcus focus in the faucial tonsils. Foci less frequently found as etiologic factors were located in the alveolar processes mostly as chronic alveolar abscess, and in the accessory sinuses of the nose. Foci in other parts of the body, such as the prostate, seminal vesicles, female genitalia, genito-urinary tract, appendix and gall-bladder, were occasionally found and deserve mention in this paper because of their relation as etiologic factors. Patients who suffer from a true arthritis deformans present not only an arthritis, varying in the individual as peri-arthritis, synovitis or osteo-arthritis but also a chronic myositis, not very painful but causing shortening of the muscular fibers resulting in a limitation of motion. The patients who were the subject of these studies suffered from general debility, anemia of varying degrees, loss of weight, lessened strength and endurance and functional nervous disorders.

Long suffering serves to intensify pain and other discomforts. In diseases running a chronic course faulty metabolism modifies the morbid process, but in these cases it did not seem to be a primary etiologic factor whereas it assumed an important place in the progress and treatment of the disease. When found the focal infection was removed and in the studies of the bacteria from these foci some notable results were achieved. The predominant organism found in the abscesses and sealed crypts of the tonsils were streptococcus viridans, usually a surface growth, and the streptococcus, hemolyticus (pyogenes) growing in the deeper infected tissues.

In a review of the cases seen by Murphy of Chicago, one can find plenty of evidence to corroborate the principles set forth by Billings. Murphy has given us the title "metastatic infection" to describe the class of joint cases preceded by a focal infection, most frequently by sore throat. The metastases take place with the same regularity as do the eruptions in eruptive diseases. The streptococcus infections take place in the joints within twenty-four to forty-eight hours, sometimes earlier. The staphylococcus requires longer. The gonococcus metastasizes into a joint between the eighteenth and twenty-second day after the appearance of the discharge in the majority of the cases. The pneumococcus and influenza bacillus require eleven to fifteen

days, the latter being usually associated with trauma. Typhoid bacilli require still longer time, i. e., several weeks. Murphy states that it is his conviction that every type of non-traumatic joint inflammation is a metastatic manifestation of a primary infection in some other part of the body.

While the dangers of sepsis from the nose, throat and ears have been recognized for some years, it is only more recently that the teeth and jaws have been demonstrated as important gateways of cryptogenic infection. Refinements in the use of the Roentgen ray have done much to develop this knowledge. The popular idea of dental infections is embraced by the idea of pyorrhea alveolaris or Rigg's disease, yet the most serious type is the alveolar abscess. Another type is the peri-cemental abscess in which the pulp maintains its vitality. Diagnosis of these two latter conditions is difficult and on this account seldom made. Alveolar abscesses result from infection of dead pulp tissue by the ordinary pyogenic flora found in the mouth. These abscesses cause little inflammation and the infection invariably seems due to the streptococcus viridans. Small pockets of pus are imprisoned in the spongy cryptoform cells of the alveolus which send forth a continual stream of toxic material into the circulation, and we know from the specific character of this toxin that it is directed against the heart itself. This toxemia is the same as that caused by the cryptogenic infections of the tonsils infected by the streptococcus viridans.

Childhood is a good time to forestall and prevent these infections and there is no knowing how much of the morbidity of later life may be prevented by proper attention to these foci in the head, especially teeth, tonsils and sinuses. The methods of direct inspection of the nose, throat, ears, trachea, larynx, bronchi and esophagus for pathologic conditions are of recent date and have been of such wonderful assistance in the diagnosis, alleviation, treatment and cure of diseases of these parts that we approach the subject with enthusiasm and commend these methods of examination and treatment to the profession at large.

We now know that most of the diseases of the ear, throat, larynx and bronchi are secondary to diseased conditions in the nose and epipharynx. The work of Holmes, Yankauer, Chevalier Jackson, Killian, Mosher, Barany, Neumann and Rutin have done much to form our new conceptions and give us a true pathology in otolaryngology. With a better understanding of diseased conditions in the respiratory tract

and ears, new classifications based on a more accurate pathology have arisen and we are now watching the passing of many old terms.

Adair Dighton of Liverpool stated two years ago, at the Ninth International Otological Congress held in Boston, that for generations and generations the nasopharynx had been known as the cause of at least 90 per cent. of aural diseases, but owing to its inaccessibility it has been given scanty attention and we as aural surgeons have gotten into a fixed habit of treating the symptoms, the aural complications, and leaving the true diseased area, the nasopharynx, more or less to nature. Many conditions formerly described as middle ear catarrhs are now known to be primarily due to changes in the mucous membrane of the nasopharynx and the Eustachian tube.

Kopetzky in a classification of internal and middle ear diseases deplores the use of the word "catarrh" of the middle ears. He says "the term 'catarrh' has the sanction of usage, and is therefore retained in classifications of ear diseases. It is employed merely as an appellation possessing in itself no pathologic significance. It is held to be simply a name given to a series of processes in the middle ear which are of a physical or mechanical nature and which are caused by factors situated away from the tympanic cavity proper."

Shambaugh likewise believes that there would be a distinct advantage in present day classifications of middle ear processes if the words "chronic catarrh" were dropped, especially because of the confusion in the minds of many which this term is certain to perpetuate. Like the old Peruna ads., "catarrh" seems to be any old thing that ails you. Following the same line of reasoning, Fein of Vienna has the following to say regarding catarrh of the nose: "A strong protest must be made against the common misuse of such expressions as 'chronic nasal catarrh,' 'chronic dry catarrh' and 'chronic cold in the head.' These expressions have become very popular, not alone with the general public but also with many medical practitioners. To the former they serve as a means of self pacification and delusion; to the latter, the medical practitioners, they supply a diagnosis which may be used to console and appease a patient who has proper cause for grumbling. It should be remarked at once that rhinologists do not recognize any such condition as chronic nasal catarrh. The diseased condition which was implied by this general title, at a period when our knowledge of rhinology was still very deficient, has now ceased to exist and has resolved itself

into a symptom-complex of various different diseased conditions in the nose." Other terms have been glibly used in the past in making diagnoses, terms which like catarrh bear no pathologic significance. Pain in the legs, joints, back, etc., are usually diagnosed as "rheumatism," "lumbago," etc., no matter what their etiology such as flat foot, sacro-iliac subluxation, traumatic spondylitis, metastatic infection, etc. Pain in the head has usually been diagnosed as headache or neuralgia. These are merely symptoms of pathologic conditions of which we are daily gaining a better knowledge.

Studies of Sluder, Onodi and Haskins of the accessory sinuses and the trifacial nerve have given us a better, clearer insight into the real pathology underlying the painful symptoms of headache and neuralgia. These old terms are passing, their places being taken by others which are based upon the pathologic conditions present.

During the past ten years considerable evidence has been produced to show the importance and frequency of diseases of the upper respiratory tract in their association with asthma. This has, of course, focused attention on the reflex theories. The work of Gay and Southard and of Auer and Lewis, confirmed by Anderson and Schultz, Biedl, Kraus and others, has brought out the similarity in lung conditions in cases of anaphylactic poisoning and those in asthma and proved that the changes in the lungs can occur when the central nervous system is cut off, as by curare, or when it is totally destroyed. Granting that asthma is caused by a toxic anaphylactic dose of the protein molecule, observation seems to show that a larger percentage of cases have a nasal origin, ethmoiditis seeming to be the most frequent offender.

In cases where efficient removal of pathologic conditions in the nose have failed to alleviate the symptoms in the bronchial tubes direct application of pressure by bronchoscope tubes and local medication through them has assisted materially. The last chapter in asthma appears to be in preparation, and modern rhinolaryngological ideas seem to be placing the handwriting on the wall. Serofula has also been so firmly lashed to the toboggan on obsolete slide by the removal of foci of infection and the proper use of tuberculin that Murphy's statement that a radical dissection of the glands of the neck had not been done in his clinic in seven years is indeed worthy of consideration. Two or three such radical operations per week were formerly considered as their "bread and butter work."

Many of these advances have occurred in recent years, and so rapidly that the profession at large finds difficulty in keeping up with the parade. Modern otolaryngological instrumentarium, ideas and technic offer so much in the observation and interpretation of formerly obscure pathologic conditions that there is no longer any excuse for treating symptoms as diseases. The real pathology underlying symptoms in the upper respiratory tract is often surprising. In order that the profession at large may obtain the greatest good from these advances, there must be a continual exchange of ideas, not only between the general practitioner and the specialist but also between the different specialisms. Nowhere could this latter be better exemplified than in the effect of the work of Billings, the internist, Rosenow, the pathologist, and Murphy, the surgeon, on proper interpretations of pathologic conditions made by the otolaryngologist in his every-day work. No more ideal condition could be asked for to produce efficient co-operation in our work and the greatest benefit to our patients. Tennyson has well said: "Knowledge comes but wisdom lingers."

The latter can only abide with us when there exists a free interchange of knowledge between the specialties and general medicine.

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DISCUSSION

DR. L. F. ROSS, Richmond: I do not feel that a great deal can be added to this paper by way of discussion, but it seems to me it is a most important paper, and we ought to appreciate Dr. Heitger's coming from his own section to read it to us. It is not so much the new things that are in the paper, as it is the emphasis on the expert way of doing these things.

I was very much interested in his presentation of the mechanics of the narrow palate and narrow arch that occur in the mouth-breathing children, and if this explanation be true—and I have no doubt it is—it shows that if we wait until the child who breathes through its mouth gets the deformity and then take out the adenoids, we do not do any good. In like manner if we wait until a child has diseased tonsils and hardening glands, it is too late. It seems to me the lesson of this paper to the general practitioner is that it is our duty to prevent these deformities and the train of symptoms that follow. The consequences of diseases of the nose and throat are many times so extremely serious. I do not think there is anything that comes in the line of a general practitioner that is more discouraging and hopeless than a developed case of endocarditis following rheumatism, for there is nothing we can do for that, and the condition goes on and the patient dies. And I have never seen a case of that sort but that I felt we ought to make a greater effort than we do to insist on having diseased tonsils removed. It seems to me there can be no question but that almost all of these cases come from infected tonsils. It is rather bad to tell people that a child has diseased tonsils and they ought to come out, but if when we have done that the parents do not understand the importance of these things, do not understand the consequences, it seems to me it is our duty, since we do under-

stand the importance, to sit down and explain to them fully the various things that are apt to follow. It is not simply to have the tonsil taken out because it is enlarged, but because it is diseased. Many of the diseased tonsils are smaller than the well ones. If the tonsil is large enough to obstruct the throat, it should be taken out, but no matter how small it may be, if it is diseased in any way it should be taken out, and if we show the parents that the child may be ruined, that it may have mastoiditis and have to be operated, and if we make them understand that if there is an epidemic of diphtheria or scarlet fever the child with diseased tonsils will most certainly take one or both; and if we make them understand that rheumatism comes nearly always as a consequence of tonsillitis; and then if we make them realize that scrofula is almost always preceded by a local infection of nose and throat, it has been my experience that many of these cases will come to operation and be saved these things that are so tedious and dangerous later on when they develop.

One other idea comes to me, and that is that it is our duty as general practitioners to try to do something for the chronic cases that come into our hands from time to time. The people who say, "Oh, yes, I have this trouble, but of course nothing can be done for it," and we say No, this is a bad climate, and let it go at that. Of course some of these cases have been salivated, and some need salvarsan, and many have a local infection; but while a great many perhaps cannot be benefited, yet some of them can, and I have seen in seven years some rather marvelous recoveries from very long-standing, obstinate and disgusting conditions of nose and throat, as a result of improper treatment. It is not the sort of thing that the general practitioner is expected to know how to do, but I believe we should know, and if not we should send them to someone who does know.

DR. HENRY B. HILL, Logansport: This is one of the most important subjects that could be presented to the general practitioners, because we see first the children who are suffering from the troubles which lead to these deformities which no one can cure after the child is an adult. The trouble is these children are not brought to the specialist for relief until they have a chronic suppurative otitis media, a mastoiditis, or some other serious condition, and the specialist finds himself almost helpless because he finds the narrow nasal cavity, the high arch, and he cannot, even though he does his best, restore the contour of that child's face.

Another point is that children who are operated late for removal of adenoids do not receive the benefit in their bony contour that they ought to receive, and would receive if they had been operated earlier. The orthodontist

has been able to help a great many of these deformities, and we have no right as rhinologists to say that there can be no relief, but we ought to direct them to a specialist in orthodontia, who can help a great many of these deformities.

DR. HEITGER (closing): You take one of these children below 10 years of age, and if he has proper ventilation and drainage of the respiratory tract, the damage done in the next few years will not amount to so much; but most of these children that suffer damage to their hearing up to 10 years, will never get back their normal hearing. During that time a great many detrimental changes may have occurred in the mucous membrane of the Eustachian tube, or mechanical closure of the Eustachian tube will result in further damage to the middle ear structures.

One thing that Dr. Ross spoke of is the fact that a large tonsil is not necessarily a case for removal. The general practitioner when he looks into a throat and sees a small tonsil, thinks the tonsils are all right. Very often if you take a retractor and pull the anterior pillar forward, you will be surprised at the amount of pus that you will be able to express from that tonsil. One of the main reasons for a large tonsil being removed is because of infection. Very often a tonsil is enlarged because the child is a mouth-breather, and in order to get a larger surface from which the air can become warmed and moistened, the tonsil becomes larger. With the restoration of nasal breathing the enlargement will go down.

In regard to these enlarged glands of the neck, a great many of them are due to the tonsils. A great many are tuberculous, and when a tonsil is tuberculous that tonsil is diseased, and it allows the tubercle bacilli to filter through and become a factor of disease in the lymphatic glands.

Another point concerning these cases of chronic septicemia. Do not call them rheumatism or lumbago, but look into the case carefully and study it and see if you cannot find in the body some place the focus of infection that is causing the trouble. Very often when the tonsil is removed we are able to get the organism and make a vaccine which will help very much in the future treatment of the case.

Another point is regarding orthodontia. Very often when these children are operated by the rhinologist they do not improve, and the reason is that they have had so much damage done to their nose by malformation that they cannot breathe through the nose. There is where the dentist comes in. He can in a great many cases undo a lot of damage which has been done by high arches. I have known cases as high as 30 years of age receive great benefit in opening up a cramped nose; but a great many of the cases are for the orthodontist and not cases for nasal surgery.

THE DIAGNOSIS AND SURGICAL TREATMENT OF GOITER*

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The subject of goiter is one of increasing importance. With a better knowledge of the pathology of the thyroid, earlier diagnosis and more judicious treatment, we are now able to remove this class of cases from among the neglected incurables.

Goiters are classed as non-toxic and toxic. Toxic goiters may be exophthalmic or non-exophthalmic. Toxic non-exophthalmic goiters are often mistaken for simple goiters.

The isthmus of the thyroid usually lies in contact with the upper three or four rings of the trachea. The entire thyroid may, however, be placed much lower, the isthmus reaching the sixth tracheal ring. In certain instances, the neck is short, the larynx low and the isthmus and lateral lobes are situated partly within the thorax.

The effects of pressure of a moderate-sized goiter are frequently more severe than the symptoms accompanying a much larger mass which has been partly extruded between the neck muscles. Headache, dizziness, cough, dyspnea and other results of pressure upon the nerves and vessels of the neck occur in simple goiter.

If the thyroid is above the thorax, the act of swallowing will cause the tumor to rise because of its attachment to the larynx and trachea, and this will help to differentiate between goiter and other tumors in the neck. If the goiter is of the low type, when the larynx has reached the highest point in its upward excursion, by quickly thrusting the finger tips between the lifted thyroid and the first ribs on each side of the trachea, the goiter can be made captive long enough to judge of its size.

A thyroid which has developed downward and has enlarged below the ring formed by the first ribs, sternum and vertebrae, will not rise by swallowing, but will bulge into the neck if the patient coughs. Connection of the substernal growth with the thyroid isthmus is often not apparent.

Intrathoracic goiter may attain the size of an infant's head and may touch the base of the heart or even pass downward behind the heart and aorta. Upon removal, or evacuation, if cystic, one can look into the chest and see the innominate, carotid and subclavian arteries, as

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well as the arch of the aorta. A small growth confined by the narrow bony ring will produce severe symptoms from pressure; the larger growths may cause death.

There is probably no condition as important as hyperthyroidism which is so frequently overlooked, yet a diagnosis is easily made by one conversant with its manifestations. So striking are some of the clinical signs that the layman who has observed a case in his family will frequently make a correct diagnosis for one of his friends.

Plummer says regarding Graves' disease, that "the clinical picture early in its history is that of a toxin acting directly on the more vital organs, most notably the central nervous and vascular systems. Later, it is made more complex by the interaction of those organs whose functions have been directly disturbed by the toxin." This statement is a key to an understanding of all the phenomena attending the disease.

Enlarged thyroid and tachycardia are always present in toxic goiter. Instability of the nervous system can also be found if sought for. Exophthalmos is seen in only one type of toxic goiter, and severe intoxication may exist without its presence. One or more of the following symptoms may be noted also: mental irritability and unrest; flushed skin, especially of the face and neck; inability to endure heat; excessive and ready sweating; diarrhea; vomiting; in women, scanty menstruation or amenorrhea; in men, loss of sexual power. All of the typical signs are not often found in one case.

There is inability to endure fatigue in proportion to the severity of the disease. Emaciation and loss of weight occur as the condition grows worse. Dilatation of the heart follows according to the severity of the intoxication, the length of time the disease has been present and the age of the patient, and may remain after other symptoms have subsided. The word "cure" must always be relative, including arrest of progress of the disease.

There are perhaps twenty eponymic signs and symptoms of hyperthyroidism, such as Stellwag's, Graefe's, etc. Their value does not warrant their enumeration.

Instead of considering didactically the differential diagnosis I wish to mention the following cases which have come under my observation: Two patients having severe hyperthyroidism, exophthalmic and emaciated, had been treated for consumption. Cough due to pressure of the goiter led to the confusion of diagnosis. Neither patient had any fever. Two patients with simple goiter, but suffering from pulmonary tuberculo-

sis, were referred for prospective thyroidectomy. Both had fever with a flushed face, cough and nervousness. Two patients with Graves' disease were treated for arteriosclerosis, one had a blood-pressure of 180, the other 160, both had received potassium iodid for quite a while, making them worse. One patient with exophthalmic goiter had been treated for syphilis, and when she presented herself for examination, had an iodid eruption.

Several cases with small goiters were brought for gynecologic examination; their exhaustion and rapid heart action being attributed to pelvic disorder, the hyperthyroidism was unrecognized. In one patient, there was amenorrhea lasting several months and pregnancy was suspected. The diarrhea, which is sometimes the chief symptom, we have seen treated as intestinal indigestion, colitis and nervous diarrhea. A patient with a husky voice from pressure of a substernal goiter and emaciated from hyperthyroidism had been treated for tuberculous laryngitis. A man in jail awaiting admission to the insane hospital was found to be suffering from acute hyperthyroidism.

Frequently, patients are given digitalis for heart disease, the thyroid cause not being noticed. Nearly every case of toxic goiter has been treated at some time to reduce the size of the thyroid by applying iodine to the neck. Iodine causes absorption of thyroid products and will reduce the size of most goiters. By this action on the toxic goiter, it increases hyperthyroidism. Patients often date the beginning of their severe attack to a vigorous course of internal and external medication to reduce the size of their goiter. For this reason, the goiter treatments advertised in lay magazines, as well as proprietary iodine preparations offered to the profession for goiter, are dangerous.

Iodine in simple goiter, as well as in hyperthyroidism, is harmful except in cases where goiter is found with a deficiency of thyroid secretion. Kocher considers the toxic non-exophthalmic goiters to be the result of continued iodine medication for simple goiter. Thyroid tablets, if used for diagnostic purposes, should be given sparingly and the patient should be carefully watched.

The observations which low-neck dresses have thrust on us, has led to the belief that a large per cent. of women in Indiana have to some extent a diseased thyroid. If there is a goiter belt, Indiana is a banner state in that belt. We must look on every enlarged thyroid, except possibly those in young girls, as a diseased gland, and in each case attempt to estimate its impor-

tance. Goiters which have been considered simple goiter for years may become toxic. Plummer says that "evidences of a damaged heart are present in about 20 per cent. of the cases coming to operation for simple goiter." Hyperthyroidism, however slight the symptoms of the disease, produces specific damage to the heart muscle aside from the injury due to rapid action. On this account, surgery should be invoked in mild cases to prevent the continued bad effect on the heart of the thyroid toxin.

Hyperthyroidism may be present as a complication in either a medical or surgical case. Operation on a patient so afflicted is as poorly borne when some other organ is attacked as when the thyroid is operated on. A recent report from Wertheim's clinic states that of 654 pregnant women examined, enlargement of the thyroid was found in 49 per cent. Several of my cases could trace exacerbations of hyperthyroidism to pregnancy or the burdens incident to child-rearing. Pregnancy sometimes acts favorably in hyperthyroidism, though it is usually harmful. Prompt recognition of the thyroid disturbance by the obstetrician may lead to a rearrangement of home surroundings, and thus prevent the establishment of Graves' disease.

All enlarged thyroids except those enlarged from physiologic changes, should be considered from the point of view of surgical treatment according to the degree of disability already produced or impending. The surgical treatment of simple goiter consists of enucleation of separate tumors from the thyroid body or partial thyroidectomy. The operation done on a patient without tachycardia is innocent, the mortality is negligible and recovery is rapid, as the following case will show:

Miss L., age 32, had suffered for eight years with a goiter the size of a goose egg involving the right lobe. She had been under almost constant treatment of physicians, osteopaths and specialists. Headache, cough, dyspnea and especially a disturbance of the eyes, were the leading symptoms. Her pulse was 76, blood-pressure 120, heart normal. Operation at St. Vincent's Hospital, Dec. 3, 1913, duration thirty minutes, partial thyroidectomy. Patient walked around the hospital on the fourth day; went home the eighth day. She reports all symptoms gone and considers her cure satisfactory.

The surgical treatment of toxic goiter consists in the removal of a sufficient portion of the thyroid so that the secretion from what remains is only enough for physiologic purposes and not a poisonous excess, or in some cases the removal of tumors constituting the diseased part of the gland. The operation of thyroidectomy itself is

not severe, except that in toxic goiter it must be done on a patient whose nervous and vascular systems are crippled. If part of the gland can be removed without causing the patient's death, the relief is as sure as it would be following the withdrawal of any other toxic poison. The unhappy result that formerly followed many operations for Graves' disease was not due so much to lack of operative skill as to the fact that the wrong operation was done at the wrong time.

On receiving a case of Graves' disease, it is my custom to place the patient in the hospital for study. Rest is enforced and careful notes as to the pulse, blood-pressure and mental stability are made. During the period of observation we must decide if the patient is able to stand thyroidectomy. Other things being equal, with a pulse which runs constantly below 110, thyroidectomy is safe. If from 100 to 130, only ligation should be done. If the margin of safety is narrow, the patient should have the benefit of the doubt. "When in doubt, ligature," is a safe rule. Decrease of pulse rate and increase of weight may be looked for after ligation, though it is only a temporary measure, either to ameliorate an incurable condition or to prepare for thyroidectomy. Some cases require one, two or even three ligations before thyroidectomy is safe. Fifty per cent. of all hyperthyroid cases operated by Dr. Charles Mayo undergo a preliminary ligation. Our cases in Indiana as they come now require a larger per cent. of ligations.

The following case shows the improvement that follows a single ligation:

Mrs. M., age 35, multipara, weight 84 pounds, advanced Graves' disease, marked exophthalmos, five to six stools daily, amenorrhea for past year, ravenous appetite, tremors marked, pulse resting 128, heart dilated, murmurs present, blood-pressure 140; case too bad for thyroidectomy. Left pole ligatured under local anesthesia. Went home at end of ten days, pulse 100 to 108. Four months later weight 125 pounds, a gain of 41 pounds, pulse 90 to 100. Heart condition, however, did not permit thyroidectomy.

Frequently, the patient demands that a complete operation be done at one step, and the surgeon may be led into taking chances against his judgment. The following is illustrative of a borderline case, and shows the postoperative course in severe hyperthyroidism:

Mrs. C., age 29, mother of five children; disease present for six years with remissions and exacerbations, gradually growing worse; present attack established thirteen weeks; has been confined to bed six weeks; severe condition precipitated by using red iodid of mercury ointment to

reduce size of goiter; entered hospital on a cot, pulse 132. The minimum pulse after two days rest 106. Morning of operation, due to apprehension and the solicitude of relatives, pulse 150. Thyroidectomy with gas-oxygen and ether lasting thirty-five minutes. Pulse immediately after operation 124; on the third day it reached 160, then it gradually declined. On the fifteenth day after operation, the patient went home, pulse 64. Weight at time of operation 90 pounds, one year later 138 pounds.

The earlier in the course of the disease that operation is done for hyperthyroidism, the nearer it approaches operation for simple goiter with its slight danger.

My experience in thyroid surgery covers twenty-seven operations done on twenty-one patients. These patients all suffered from thyrotoxicosis except two. Of these twenty-seven operations, one patient died following the operation, a thyroidectomy. There were eighteen thyroidectomies with one death; the other seventeen are living. Two patients on whom ligations had been done merely to alleviate their condition, died; one a year later, one six months later. Both of these were recognized as incurable on account of the extent of cardiac disability, and thyroidectomy was never attempted. Ligation in each case gave relief and benefit, justifying the work. No other patient has died on whom we have operated for goiter.

Sufficient time has not elapsed since any of the thyroidectomies to justify a claim of cure. All report marked improvement and most of the patients consider themselves cured. There has not been a single unsatisfactory result except the one case that died. One patient who submitted to double polar ligation (March, 1911) now has a normal pulse, and thinks herself well.

The results of goiter surgery are gratifying and the patients are enthusiastic in their recommendation of surgery for thyroid disease.

The technic I employ is that used in the Mayo clinic, with modifications suggested by Wathen. Ether anesthesia has been used in most of the thyroidectomies, gas-oxygen in four cases satisfactorily, and local anesthesia once. The method of performing the operation without the patient's knowledge has been used twice; it has great merit in certain cases. The success of this rests with the anesthetist. In no other operation is a skillful anesthetist more important.

Operation alone must not be depended on to effect a cure in exophthalmic goiter. The patient should be prevented from returning to an unfavorable environment, as the remaining portion of the thyroid may hypertrophy and cause a relapse.

608 Indiana Pythian Building.

DISCUSSION

DR. ALBERT E. STERNE, Indianapolis: I would like to mention, or emphasize rather, just two points. One of these the essayist brought out, viz., that every goiter, however benign, becomes potentially or is potentially an active goiter and that the malignant aspect of hyperthyroidism is very frequently superimposed on a benign aspect. The other point is in reference to the use of iodine preparations. There are some cases of goiter which come under the province of the neurologists which usually do well on iodids. These are those cases to which reference here this morning has not been made, nor was reference made to them yesterday. They are those in which a synchronous syphilis exists and which is presumably, at least, the basis for the disfunction of the thyroid gland. We cannot say absolutely that the syphilis is the cause in even these cases of hyperthyroidism. There is no manner in which we can assert or find out except through therapy that the basic syphilis has anything to do with the condition of the thyroid gland. A careful blood test should be made repeatedly, because a Wassermann is not always apparent in these cases. I agree with the essayist that ordinarily speaking the iodids serve rather to increase the disfunction of the gland than to relieve it or to obviate it. We have in the city of Lafayette just at this moment a patient who is suffering from a pronounced case of tabosyphilis, a young woman, I think, Dr. Thompson. She is not yet thirty, is she? (Thirty-two.) This patient has been in my care for a while. The question of syphilis had not been suspected. Her condition was pronouncedly tabetic, of three years' standing, beginning shortly before her marriage and increasing steadily. The thyroid condition, however, antedated the incidence of the tabetic symptoms. Now, in this instance we were in a quandary. This patient showed pronounced hyperthyroidism, and a Wassermann showed 100 per cent. positive reaction. We cautiously started in with her treatment, thinking it was absolutely essential that this patient be put on an antisyphilitic treatment. She received her injections, salvarsan intravenously, as I was afraid to give intraspinal injections. And then we started in with the iodids, and this patient has shown some improvement, not much, but some improvement. The hyperthyroid status has not been increased, and I believe Dr. Thompson will corroborate that statement. He has seen her recently; I have not seen her for several months, but under my observation the hyperthyroid condition was not increased during the period over which she had been using the iodids; and, on the contrary, it had diminished somewhat. Now, this experience is extreme. This case is one of the most extreme type. She would have been but a poor surgical risk for an operation on the thyroid, even were

the question of her tabes and syphilis not present at all. I have seen other cases, however, in which syphilis was apparent, proved unquestionably, in which the tabetic symptoms alone were not exaggerated, but where the hyperthyroid status was exaggerated, which have improved under combined antisiphilitic treatment. Now, in this class of cases I would counsel that a careful use of the iodids be inaugurated, very cautiously done, and if the patient does well, and there is no sign of increased hyperthyroidism, then, in this instance, I think that we can safely push the iodids just as if the question of hyperthyroidism did not come into play.

DR. GEORGE D. MARSHALL, Kokomo: I have under observation at the present time a case of hyperthyroidism that presents some peculiar phases. This is in a woman 65 years of age, who has been ill for the last two years. She has quite a marked enlargement of the thyroid gland and a great deal of pulsation, some exophthalmos, tachycardia with arrhythmia, the pulse-rate is very irregular (the rate being about 72 for probably seven or eight beats, then there will be ten or twelve beats which are very rapid). The examination of the urine does not disclose anything, although some former physicians in the case have reported the presence of glycosuria, but I do not find that present, nor do I find tubercasts or pus-cells; in fact, there is no evidence in the urine of a disturbance of the kidney function. However, this woman has a most extreme ascites and a great edema of the legs and feet. If she lies on one side, the edema will extend up on her chest. This edema does not appear to be altogether serous, it is a little too solid for that, suggesting the idea that it probably was a myxedema. She has been in ill health for the past two years, and for the past four months now she has hardly been able to be up and down, although she has not confined herself to her bed entirely until since I have had her under my care. I have ordered complete rest for her, and will attempt to relieve the fluid by medical means before resorting to tapping. This appears to be a mixed case. While we would not expect myxedema with the hyperthyroidism, still there seems to be a condition of some sort there that is producing this edema. The gland is large. There are the typical symptoms of a hyperthyroidism. Several times, the effect of rest in bed has been mentioned here during this session, some speakers mentioning the rest in bed as a guide rather in the prognosis of the case than anything else. I do not believe that that is the case, because I know I have in mind now a patient, or one who was a patient some eight or nine years ago, who had a typical hyperthyroidism, with pronounced exophthalmos, enlarged gland, and all the symptoms that go with it. She had lost a great deal of weight and looked seared and miserable all the time. Under complete rest for some two months in bed that patient recovered her weight and her health and

has been well since. She has had absolutely no recurrence of any hyperthyroidism.

In recalling these cases of hyperthyroidism, which are comparatively common, I remember one in particular in our town that had been seen by different doctors and in which the mental state seemed to have a great deal to do with the exaggeration or the occurrence of the symptoms of hyperthyroidism. When that patient would become troubled or excited in any way her hyperthyroidism would become much worse; at other times she would be fairly comfortable.

DR. J. R. EASTMAN, Indianapolis: The Chair would like to say a few words in the discussion of this unusually good paper by Dr. Link.

Now I wish to be correctly understood. I do not mean to make any strictures concerning the actions of our program committee, but the paper of Dr. Link should have been read in the general session, because if this paper had been presented there all of the doctors of our Association, the general practitioners as well as the surgeons, might have been reminded of the excellent results that are secured now by the application of surgery in these cases.

I wish to call your attention to the article of John Rogers in the current number of the *Annals of Surgery*, in which he divides the tumors of the thyroid gland into simple goiter, the exophthalmic goiter, cancer (including sarcoma and carcinoma), and myxedema—rather, perhaps I should say, the diseases of the thyroid gland. Now my point is this, that all of these conditions are surgical. Every case of myxedema and every case of exophthalmic goiter, in the opinion of Rogers who has done more serious and more extensive work along this line, I think, than any other man, had its beginning in a simple goiter. So that, except in those entirely innocent enlargements of the thyroid gland which occur at the puberal age, and those enlargements secondary to pregnancy, excepting those perfectly innocent enlargements, we have to deal with a surgical condition. Those of us who have tried the very scientific serum method of S. T. Beebe are certainly not enthusiastic in endorsement of it.

Finally, these conditions are surgical, and it is too bad that the entire Association might not have heard this message as to the good results of surgical treatment of thyroid affections.

DR. GOETHE LINK, Indianapolis: I will not take much more of the limited time that we have. I do, however, want to call attention to the question which Dr. Marshall raised in his description of a case. I think his case is a typical example of a woman who has probably had a mildly toxic goiter for years. It has been affecting her heart all that time. Now she has become a victim of heart disease. The time to have done her any good was fifteen or twenty years ago, before Dr. Marshall saw her. We have hundreds of cases of that kind in Indiana to-day.

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EDITORIALS

ARRANGEMENTS FOR SESSIONS OF
OUR ASSOCIATION

In the correspondence department of this number of *THE JOURNAL* will be found a communication concerning the general arrangements for the annual sessions of our Association. Much can be said in favor of a fixed location for the annual sessions, but much more can be said in favor of migration.

The migratory idea was adopted with a view to injecting new life into an organization that needed stimulation and a broadening of its sphere of usefulness. When the Association met regularly at Indianapolis one seldom saw any new faces, and despite the fact that the sessions were by far the most important medical gathering of any held in the state, yet some portions of the state were never represented and others were represented by a very limited attendance. When the Association began to migrate, going to the larger cities of the state outside of Indianapolis, it at once took on a growth and progress which has continued up to the present time. The immediate tributary territory to the place where each annual session has been held has shown an interest and an attendance at meetings that was never attained under the old plan. Physicians who had never attended an annual session went because the session was right at his door and he was not compelled to expend much time, energy or money in attending. His first attendance led to further attendance with its value to him and the Association. The opportunity given members of the Association to see the country and the cities of the state is the least of the advantages offered by migration, and yet those features are added to the sum total of the benefits derived from the migratory policy.

We are not in sympathy with the idea expressed by some members that more attention should be paid to social features and arrangements for sight-seeing. Our annual sessions are or should be arranged and conducted so as to

afford the greatest amount of scientific benefit for those who go to the trouble and expense of attending. We are distinctly in favor of a smoker or some similar social feature for the first evening, for the purpose of bringing the members together for the renewal of old and the formation of new friendships and acquaintanceships. No social features of any kind whatsoever should be scheduled for the hours when the scientific meetings are supposed to be held. The sight-seeing trips should precede or follow the session.

We are heartily in favor of making our annual session cover three days, and using the first day for sight-seeing, social features, and the purely business meetings such as those held by the House of Delegates, the Council and the Secretaries' Conference. The succeeding two days should be devoted entirely and exclusively to scientific meetings, and absolutely nothing should be scheduled which will detract in any way from these scientific meetings. Such an arrangement as suggested will permit those who care for the scientific proceedings only to attend for the two days, and those who care more for the social features and who feel that they cannot afford to be away for three days can cut one day off from the scientific end. We do not believe that the present plan of migrating should be abandoned, though we are heartily in sympathy with the view expressed by many that the Association should meet in Indianapolis every other year, leaving the alternate years for the other cities of the state.

This leads us to the further suggestion that no city outside of Indianapolis should make a bid for the Association sessions unless prepared to care for the visitors in a very satisfactory manner. This includes not alone the accommodations for the members, but suitable accommodations for the meetings of the Association. The expenses of the annual session should be borne by the Association. The local medical profession in cities where the sessions are held do quite enough when they look after the entertainment of the visitors. We also are heartily in favor of placing all the other arrangements of a purely business character in the hands of a paid representative with full instructions from the Secretary of the Association as to how to proceed.

Every effort should be made to have every annual session a scientific treat, for the majority of those who attend go for the purpose of getting something out of the meetings that will help them in their daily work. The social features are a secondary consideration entirely,

and many of the members would be just as well satisfied if some of the social stunts were cut out altogether. Those who are selected to take part in the scientific programs should consider it an honor that is to be repaid by the best effort that can be put into the work assigned. Except for unusual causes, no one who accepts a place on the program should default. The officers, and in particular the officers of sections, should perform their work in a business-like way, being prompt in calling meetings to order and insisting that the program shall be carried out according to rule. The importance of placing at the head of the Association a man who is interested in scientific progress in its fullest sense is attested by the fact that our most successful sessions have been those occurring under the administration of men who have a reputation for doing things. For the coming year, President Wynn has a surprise in store for the members of the Association, and we look forward to the session of 1915 as promising to be one of the most profitable from a scientific point of view that the Association has ever held. We hope that the prediction will be fulfilled and that the example set by our worthy president will be handed down to his successor. The Association deserves and should have the support and cooperation of all progressive physicians, and the scientific spirit should predominate at all times.

THE INTER-STATE DOCTORS

THE Inter-State Doctors are infesting Indiana. They are allied to the breed of fakers that have gone by the name of "United Doctors," "United Specialists," etc. Glaring newspaper articles announced that they would open offices in Fort Wayne late in November, and at about the same time announcements were made that they would open offices in Logansport. Perhaps there are other towns yet to be heard from where they promise to bring their "marvelous skill" (?) to a long suffering community. According to the advertising, the high priest of the outfit is the celebrated "Master Specialist," Dr. S. M. Bartlett. He has been wise enough to register at Fort Wayne, but as yet we have not learned that he has registered at Logansport. At all events, he advertises as doing business at the same time in both places, and the Indiana Board of Medical Registration and Examination is given this information gratuitously.

Without going into detail we desire to place before our readers a little history concerning the

Inter-State Doctors, and in particular S. M. Bartlett, who seems to be running the concern here in Indiana. From *The Journal of the A. M. A.* we learn that Bartlett graduated in 1904 at the Physio-Medical College in Indiana, which school went out of existence in 1909. Until a little over two years ago he practiced at Oakford, Howard County, Indiana, a town of 150 inhabitants which has not supported a physician since he left. After leaving Oakford he became one of the hired men of the "United Doctors" at Kokomo, Ind., where he was immediately made one of the United Doctors' "great specialists," and was then transferred to the South Bend office. The office at South Bend, after a desperate struggle for existence, was closed and Bartlett evidently wandered off to other fields, later to show up in Indiana. Bartlett is an example of the way in which "master specialists" are made in a short time out of indifferent or poor material and are foisted upon the public as men with special skill and training. Like all of his ilk, he depends upon extravagant and absurd statements in newspaper advertising to attract gullible patients, and he profits through the deception and incompetency which accompanies quackery.

It is a matter of astonishment that in this day and age reputable newspapers should lend themselves to such gross forms of swindling as that which contributes to the success of quackery. In effect the newspapers make themselves partners in a crude confidence game in which their own patrons are not only swindled out of money, but many of them are irreparably harmed by the treatment or the lack of the proper treatment they require. In most of the states the authorities, stimulated by aggressive action on the part of Boards of Medical Registration and Examination, have put these fake medical institutions out of business. In Indiana the Board of Medical Registration and Examination pays little or no attention to quackery, but is ever ready to exact the pound of flesh from some highly respectable and ethical doctor of good reputation and ample requirements who happens to fail in the slightest degree to meet the requirements of our medical practice act. Another strange thing about this matter of stamping out quackery is the fact that prosecutors require an affidavit before proceeding against quack doctors who are practicing without license or guilty of any infraction of the medical practice act, and they expect members of the medical profession to file the affidavit. If a saloon keeper opens a

saloon without a license or is thought to be guilty of any infraction of the law governing the operation of a saloon, the prosecutor and other officers of the law do not ask nor do they expect another saloon keeper to file the affidavit required in order to institute prosecution of the offender. Why then should members of the medical profession be expected to file affidavits against medical fakers and pseudo medical practitioners of any kind who are openly practicing medicine in direct violation of the Indiana laws? Even the medical practice act has a provision which reads as follows:

"The State Board of Medical Registration and Examination is charged with the duty of enforcing this act, and it shall be the duty of the prosecuting attorney upon complaint of the board to prosecute any violation of this act."

In other words, the board could and should stamp out such quackery as thrives under the name of "United Doctors," "Inter-State Doctors," and other high sounding titles. It is time for someone to get busy in an endeavor to stamp out the shameless medical frauds that are used to impose upon the people of the state of Indiana.

SELF DRUGGING

It has been said that the American people take more medicine than the people of all other nations combined. While this statement probably is a gross exaggeration, it must be admitted that the habit of self drugging is well established in this country and the home is not too poor to afford its medicine cabinet in which practically all well-known drugs and not a few proprietary compounds are kept. The majority of ailing people make their own diagnoses of their affections and, before consulting a physician, resort to the remedies in the home medicine cabinet for relief. The results are not always what were expected and sometimes are harmful, but that does not deter the average individual from attempts to doctor himself.

That this practice of self drugging has been encouraged by physicians cannot be questioned, though the druggist and the manufacturing chemist have aided greatly in establishing the practice. The physician encourages the practice by giving advice as to what drugs, and the manner of taking them, that the patient is directed to procure without prescription at the nearest drug store, or he gives a prescription which not one druggist in five hundred will refuse to refill for the one to whom it was originally given or

for anyone else who asks for it. Some druggists do not hesitate to give the prescription to others for use at will. If the physician informs the patient as to what medicines are being prescribed and the doses of the same, as is frequently the case, the patient is at once put in a position where he feels that he can use the same drugs without the advice of the physician. Thus it is that quinin, strychnin, phenacetin, salol, Bland's pills, sodium salicylate, and a dozen other drugs or pharmaceutical specialties that might be mentioned are carried in the family medicine cabinet and used all too frequently when supposedly indicated.

The manufacturing chemist skillfully has assisted in the practice of self drugging by preparing pharmaceutical specialties which he makes every effort to have prescribed in original packages, or which are manufactured in such form that when once prescribed are ever after recognized and can be obtained readily by any patient without the intervention of the physician. In the beginning the manufacturing chemist is very careful to introduce his preparations to the medical profession only, and he scorns direct patronage of the public—well knowing that if he once secures recognition from the medical profession he can go direct to the public later for that enormously increased patronage which comes as a result of the stamp of approval which has been placed on his products by medical men and through them transmitted to the public. In that manner practically all of the well-known drugs and pharmaceutical specialties that are commonly used by the public have secured their popularity and large sale.

One of the newest preparations introduced to the medical profession and rapidly finding its way into the hands of the public for self drugging is atophan. This remedy presumably is manufactured, advertised and marketed in an ethical manner, for it has received the approval of the Council on Pharmacy and Chemistry of the American Medical Association. But atophan, like many of its predecessors that have started out as ethical preparations and had to have the endorsement of the medical profession before they could secure the extended sale to the public that they afterward enjoyed, gives evidence of having been prepared and marketed with the idea of creating a demand for it that is wholly independent of the recommendations of the medical profession. Not alone is atophan marketed in small but distinctive containers containing twenty tablets, thus encouraging the prescribing of the remedy in original packages, but

the manufacturers are going a step farther by inclosing in the original packages a small circular which gives comprehensive information concerning therapeutic indications, administration, and dosage. Incidentally, we desire to remind the Council on Pharmacy and Chemistry of the American Medical Association that their findings are not worth following when they give their approval to a remedy like atophan that is marketed in a manner that is in direct violation of one of their most important rules, which discountenances underhand advertising of drugs and pharmaceutical specialties to the laity. The firm that is exploiting atophan in this country is the one that also exploits anusol suppositories, pertinent comments concerning which may be found in *The Journal of the American Medical Association*, Jan. 23, 1909, Oct. 11, 1913, and Jan. 31, 1914.

Aside from the encouragement given to self medication by such firms as the one exploiting atophan — and they are only one of many transgressors — by far the greater initial encouragement and assistance is given by the medical profession. The doctor gives his rheumatic patient a prescription for atophan and knowing that the manufacturers have put the remedy in tablet form and in convenient sized packages containing twenty tablets, he prescribes an original package. The patient is told what he is to take, or he learns it from the prescription, and from that time forth he prescribes for himself. He is encouraged in the practice by the druggist who will sell without prescription, and the manufacturer who puts the remedy in a convenient sized original package and includes a printed circular giving detailed information as to the numerous inflammatory conditions for the relief of which atophan is indicated, together with complete information as to dosage and manner of taking. Just as simple as falling off a log, and the doctor is the one primarily at fault. Atophan on prescription sells for one dollar by the majority of druggists, but it sells to the public without prescription for seventy-five cents, and we are informed reliably that for one box of atophan sold on prescription, five are sold direct to the public without prescription. And this sale to the public without prescription is due not altogether to self prescribing on the part of the patient, but not infrequently to the physician who tells his patient what to get but does not give a written prescription for it.

There certainly is room for reform in the manner in which we prescribe for our patients — not only as pertains to our own protection but

the protection of the patients themselves. It is not necessary that the patient shall know what medication is being prescribed, and as a general proposition it is better that he shall *not* know. Every physician is familiar with the self-opinionated patient who has an exaggerated idea of the good or harm that may come from certain drugs about which a limited amount of knowledge has been secured through some confiding physician. Such a patient is sure to resort to self drugging, and, when advised by the physician concerning medication he invariably uses his own judgment to a more or less extent, with possible unfavorable results for himself as well as his physician. And in the matter of prescriptions it is an element of protection to physician and patient alike to insist that the druggist shall not refill nor give a copy of the prescription. If this plan cannot be enforced, then we are unhesitatingly in favor of having the drugs dispensed by the attending physician; for self drugging, with all of its ill effects, is directly traceable to the physician, and to the physician we must look for the adoption of means to limit the practice.

ATTEMPTS TO LOWER THE MEDICAL STANDARD

According to a statement made by the secretary of the Indiana State Board of Medical Registration and Examination, the chiropractic and other newly-born healing cults made very strenuous efforts to defeat candidates for the office of county prosecuting attorney who would not promise them immunity from the requirements of the medical practice act. They also aimed to defeat legislative candidates who would not promise to aid them in passing a law permitting them to enter the practice on a lower educational standard than we have in Indiana now. Just how far these efforts were successful is hard to determine, but we hardly believe that sufficient influence could be brought to bear in any community to offset the very natural tendency on the part of men seeking office to uphold existing laws. It would be well for the incoming legislators to be made acquainted with the fact that, as pointed out by the Indiana State Board of Medical Registration and Examination, Indiana does not discriminate in favor of or against any system or school of practice. The specialist, the physician and surgeon, the homeopath, the osteopath, and the chiropractor must undergo the same training and pass the same state examination except that the examination

in *materia medica* is not required of practitioners not using drugs in the treatment of disease. One may select any specialty he chooses and may adopt any method which his or her educated judgment dictates. He may use large doses or small, massage or electricity. He may analyze or adjust, but what the state requires for one body of practitioners it cannot abate in favor of another without being open to the charge of unfair discrimination.

The state now demands that any man or woman who enters on the practice of the healing art shall have an adequate education. No favors nor special privileges are given to any system or school of practice. The law regulating medical education is simply a part of the great educational system of the state. The followers of some of the newly-born healing cults are persistent in their efforts to break down medical educational standards in order that they may be permitted to enter the practice of the healing art without complying with the present state educational test of qualification. Every legislator should be acquainted with these facts, and should be interested sufficiently in fair play to refuse to sanction a law that discriminates. Any person who practices the healing art should possess certain qualifications, and the qualifications that now are demanded by our state laws are none too exacting.

MEDICAL PUBLICITY

Laymen are always anxious to hear something about medicine, whether it be fact or fiction, and generally they are better satisfied with and will accept with better grace the fiction that is disseminated by over-zealous newspaper reporters, quack doctors and pseudomedical cults. The average sick person, while assiduously cultivating a spirit of pessimism, is constantly on the lookout for medical advisers who will offer optimistic advice. It is the stimulation of the pessimistic view in the mind of the patient as to the seriousness of his condition, and then counteracting the same with optimistic advice, that is the stock in trade of the quack doctor. An innocent lesion, suspected by the patient as being cancerous, is diagnosed by the quack doctor as being cancerous even though he knows his diagnosis to be false, and then his optimistic advice that the lesion can be cured often leads to illy-placed confidence which is strengthened if recovery takes place, as it often does, under little or no treatment. Thus the life of quackery depends on establishing a false attitude as to the nature, extent and possi-

bilities of the diseased condition and then profiting by the results secured through comparatively simple means. It is the false and seductive promises put forth in newspaper advertising which bring business to the quack doctor, and, being a liberal patron of the newspapers, it is difficult to get newspaper editors and owners to understand that such advertisers are really members of that great multitude of fakers who live by their wits and practice any sort of deception to gain profit. This would do little harm if it always applied to innocent lesions, but unfortunately the malignant or serious lesions also fall into the hands of quacks who are illy prepared to give conscientious and competent attention, and suffering humanity pays the penalty for misplaced confidence.

The fact that quacks patronize the newspapers so extensively is one reason why ethical physicians are so sensitive concerning newspaper publicity and why they neglect or refuse to give certain valuable information publicity. Another reason for the reluctance on the part of physicians to give newspapers information on scientific subjects is found in the recognized tendency of newspaper writers to distort or exaggerate any information that is given them. In other words, the average newspaper reporter does not want facts as much as he wants sensational matter, whether fact or fiction, and if whatever is given him is not suitable to his purpose he proceeds to color it to his liking whether it conforms to the rules of truth or not. It is this distortion of facts, aside from the regular habit of newspaper reporters to use the name of the physicians as the source of their information, even when requested not to do so, which makes the ethical members of the medical profession afraid to have anything to do with newspapers in the way of interviews. There is room for a better understanding between newspaper editors and members of the medical profession, and we venture to say that when editors show a disposition to present medical facts to the public in the proper way the members of the medical profession will be only too glad to give encouragement and assistance. To avoid the charge of being notoriety seekers or desirous of advertising gain, it should be the rule of medical men to avoid being quoted in newspapers except when acting in an official capacity. On the other hand, the newspapers should be willing to quote accurately and without color. In no other way can the press and the medical profession get together in this matter of educating the public on medical subjects.

EDITORIAL NOTES

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DO IT NOW! Pay your dues while the matter is fresh in your mind!

THE JOURNAL extends to all of its readers a wish for a Merry Christmas and Happy New Year.

IF the druggists succeed in compelling doctors to write prescriptions for everything prescribed for patients then it would be a good idea for the doctors to own the drug stores that they patronize.

WITH small-pox prevalent in so many counties in Indiana it is a good policy to urge general vaccination. There is no reason why we should wait until small-pox gets in our neighborhood before we adopt preventive measures.

AGAIN we are making a bid for volunteers to give Conservation of Vision lectures. Don't all speak at once! A great deal was accomplished last year but we hope to accomplish much more this year. The Editor of THE JOURNAL, as chairman of the A. M. A. Conservation of Vision movement in Indiana, is prepared to give suggestions concerning the work, and hopes to have volunteers in every city and town in the state.

THE mortality from cancer is on the increase. In the age period above forty, cancer as a cause of death stands above tuberculosis, pneumonia and typhoid fever. The control of cancer depends on education. Early diagnosis and prompt surgical intervention is necessary, and the public should be thoroughly acquainted with this fact. With its usual progressiveness, the Indiana State Board of Health will prepare a leaflet on this subject for free circulation.

THE Union County Health Book is the title of a well-prepared book of seventy-four pages that is printed and distributed to every family in Union County, Indiana, by Dr. Will A. Thompson, County Health Commissioner. The book contains brief but clear statements concerning the care of health and rules for the prevention of sickness. Considerable space is given to the attention required for children. It is a credit to the county, and the example is worth following by other counties in the state.

THE Indiana State Board of Health prints a number of pamphlets on disease prevention which are intended for distribution among the people. Physicians may obtain these pamphlets or circulars on application. Knowledge of disease prevention would be disseminated to a greater extent if all physicians would secure these pamphlets and distribute them to their patients as occasion indicates.

A LOT of people are crying hard times, and using that as an argument to avoid the payment of doctors' bills, but we notice that the fellows that are bellowing the loudest are the ones who manage to buy new automobiles. Even the farmer, who talks about poor crops and wants you to discount his bill or wait until next harvest for your pay, has no difficulty in finding enough money to buy a new Ford.

THE Metropolitan Insurance Company has dedicated a tuberculosis sanitarium for its employees at Mt. McGregor, New York. This is commendable enterprise on the part of the insurance company and is in keeping with the policy of many companies to furnish policy holders free health examinations and specific advice on how to keep well. The insurance companies are paying not only to keep people well but are paying for them when they are dead.

DR. GEORGE F. BUTLER, the genial director of Mudlavia, Kramer, Ind., long has been noted as an able post-prandial speaker. Presumably he has held the laurel wreath in eulogizing the fair sex, for he is called upon frequently to toast the ladies. His latest contribution of this sort has been published in one of our eastern exchanges and is worth reading. As Dr. Butler has become a "Hoosier" but recently it would be well for Indiana doctors to remember his gifts when arranging post-prandial programs for entertainments which he may attend.

THE secretary of the State Board of Health complains about gross errors in the reports of death as found in some death certificates filed by Indiana physicians. He very justly says that in order to obtain accurate morbidity information in all cases it will be necessary to have better medical education and elevation of the conscience of the profession. Unfortunately most of the gross errors complained of can be traced to some of the older physicians who graduated at a time when medical standards were low and they have failed to keep abreast with medical progress.

DUES are payable now. Secretaries of county medical societies are reminded that the Association dues should be turned over to Secretary Combs immediately after collection. Failure to give this matter attention may mean that some physicians become delinquent through the fault of county secretaries, and while delinquent are not entitled to the medical defense feature of the Association. It might be a very embarrassing feature for all concerned to have a delinquent member sued for malpractice when in reality the delinquency is due to failure on the part of the county secretary to turn in the dues. All members become delinquent on and after February 1.

EUROPEAN surgeons certainly are having an abundance of experience as a result of the terrible war that is now going on. The trouble is that there are too few surgeons and too limited accommodations for the proper care of those that have been wounded. However, there will be some new knowledge developing in consequence of the varied and enormous experience that has come to the leading surgeons of Europe, and at the close of the war the European clinics will be a fruitful field of study for those American physicians who make the rounds of the clinics in London, Paris, Berlin, Vienna and other medical centers in an endeavor to profit by the advanced teaching which such centers afford.

WHATEVER may be said concerning the grasping tendencies of the pharmaceutical profession it must be admitted that the American representatives of the manufacturers of salvarsan and neosalvarsan have shown a commendable spirit of fairness in refraining from advancing the price of these products in consequence of the European war and the impossibility of obtaining fresh supplies. Perhaps the prices of salvarsan and neosalvarsan are altogether too high, as claimed by many, but be that as it may, the fact remains that with a shortage of supplies and no prospect of renewing them the average commercial house would take advantage of the situation and advance the prices. As this was not the case with salvarsan and neosalvarsan we feel that those responsible for this attitude are deserving of the highest commendation.

At present there is a good deal of criticism of the premedical courses offered by many colleges and universities. The trouble with most premedical courses is that they do not properly fit the student for the medical course, and except in those universities where academic courses are combined and made to fit one another there is

little effort made by other institutions to meet the requirements of medical schools in the way of furnishing adequately trained students. There should be some uniformity in premedical work and it would be well for our American Medical College Association to prescribe a minimum premedical course that may be followed by colleges or perhaps the better grade of high schools. The A. M. A. Committee on Medical Education could do a real service by publishing a list of schools that furnish an approved premedical course.

E. L. MOSES of Buffalo, N. Y., vice-president of the Oxypathor Company, and one of the chief oxy-fakers in the country, is the man sentenced to eighteen months by Judge Martin, of the United States Court, in Rutland, Vt., for circulating fraudulent claims of oxypathor cures. The oxy-fakery exposed in the United States Court in Vermont is all based on the curative claims made for a small tin can with telephone wires and garter attachments. The mysterious tin can is submerged in a goldfish bowl of water. The garters are strapped around the ankle and wrists of the sick person. Through the telephone wires connecting the garters with the submerged tin can a mysterious curative power is then supposed to travel into the human body and cure everything from a toothache to typhoid.—*Lancet-Clinic*, Nov. 21, 1914.

AMERICAN watering places should profit by the European war. Our rich and would-be rich have considered it the proper thing to visit the famous spas in Europe, notwithstanding the fact that America possesses watering places that are equal to anything the other side of the Atlantic. There is absolutely no reason why Americans should visit Wiesbaden, Carlsbad, or any other European watering place through a mistaken notion that those places are superior to anything we have in this country. Our health resorts are unsurpassed, and except for the fact that they are here at home and the benefits derived from them cost less in time, energy and money, they should appeal to those who heretofore have been running off to Europe in search of health. This reminds us that there never was a better time for boosting our American health resorts, and we therefore call attention to the well-known sanitariums advertised in *THE JOURNAL*.

INDIANA UNIVERSITY is attempting to correct the flat chests and flat feet of the students by drill. A large number of those entering the school are found defective physically. One out of every six in this year's freshman class has

been classified below normal development after allowances have been made for weak eyes, bad teeth, and other minor defects. Young men at the age of 17 and 18 have the figures of men of 50, and Dr. J. E. P. Holland, university doctor, states that this is due to negligence and carelessness rather than improper nourishment, factory work, or sweatshop life. Flat feet is a common failing among the young women, who as a rule are more nearly normal than the young men. This results from the heelless shoe, and with the return of heels to fashion this defect will decrease. Fortunately all these defects may be remedied to a degree or entirely overcome by physical training, and much interest is manifested in this work by the students as well as directors.

THE president of the American College of Surgeons, in his annual address, described fee dividers as "those who buy and sell patients." He indicated that there is a crying need for more better educated and better trained medical men, and also room for more doctors who possess to a greater degree a sense of honor and adherence to high professional ideals. When we learn, as we have recently, that a young girl having a surgical condition not considered dangerous to operate, failed to receive attention at the hands of a very competent and experienced surgeon because that surgeon would not consent to a 50 per cent. secret division of the operative fee, and then lost her life at the hands of a young, illy trained and inexperienced surgeon who is known to be willing to *buy* patients, we are quite in sympathy with all that has been said concerning the need for more men in the medical profession with higher ideals. The wonder is that the public has any confidence in the medical profession when so much is sacrificed to commercialism.

THE Wisconsin eugenics law has been sustained by the Supreme Court. The law provides that couples intending to marry must, in order to obtain a marriage license, present certificates from physicians stating that they are physically fit. The law provides for the payment of certain fees to physicians for making the necessary examination, but the fees as provided are so ridiculously small as to bring about the refusal of the majority of Wisconsin physicians to make the examinations. The well-to-do classes will pay respectable fees without question, and it remains to be seen whether an effort will be made to compel physicians to make the examinations for the fees provided for by the law. "You can lead a horse to water, but you cannot force him

to drink," and it may be that there are some physicians who will be willing to make the examination for the fees provided by the Wisconsin legislature, but we believe the majority of the competent Wisconsin physicians will refuse to do so. Furthermore, the ridiculously small fees have a tendency to bring about hasty and worthless examinations by those illy prepared to do trustworthy work, and under such conditions the good effect of Wisconsin's eugenic law will be destroyed completely.

THOSE who are lamenting the onset of blindness should take on a spirit of optimism after learning of what has been accomplished by some of those who have been afflicted similarly. Some of the blind schools are doing a wonderful work in teaching the blind to be self-supporting, and as an evidence that years do not count in adapting one's self to conditions, the experience of a woman of Massachusetts is worthy of note. She became blind at the age of 67 and since not only has mastered sewing by touch, and the effective use of the typewriter, but has written, rewritten and published a book. Now, in her eightieth year, she contributes an article to the report of the Massachusetts Commission for the Blind on "Lessons Learned in Blindness." It would be well for the public in general and physicians in particular to bear in mind that the various schools and industries that have been established by commissions for the blind offer an avenue for not only the education of the blind, but a means of learning a trade that will make the blind self-supporting. There is no reason why the able-bodied blind person should become a charge on relatives or on any community. Furthermore, every blind person is happier and more contented in being occupied with work that can be done.

AT this time of the year two questions are asked the several county secretaries which they are not always able to answer.

First, members joining in December or delinquent members who pay dues the last of the year ask the county secretaries for a reduction in the amount of the dues. There is but one answer to this question and that is that the Constitution and By-Laws of the State Association make no provision for prorating the yearly dues, which are \$2.00 for each member irrespective of the time the payment is made. However, some of the county societies do and are allowed to make reductions in the local dues, but this should not be confused with the assessment levied by the State Association.

The other question is whether a member can elect to pay for certain privileges of the Association and not pay for others. The confusion probably arises from the fact that on the triplicate receipt there is an explanation of how the two dollar fee is to be apportioned in maintaining the State Association. The dues are \$2.00 in every case whether the member wishes to avail himself of the privileges of medical defense or of reading *THE JOURNAL* or not.

At the present time the dues of the Indiana State Medical Association are lower than most of the other state associations, and rather than complaining about paying less than a cent a day for membership, we should be thankful that the activities of the Association are maintained at such a nominal cost.—Chas. N. Combs, Secretary.

DURING November the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-official Remedies:

Antiseptic Supply Co.: Cupric Applicators; Cupric Applicators, Special; Caustic Applicators, Special; Stypstick Applicators, Special (accepted for the appendix to N. N. R.).

Laboratory of W. T. McDougall: Pasteur Antirabic Vaccine.

H. K. Mulford Co.: Solution Pituitary Extract.

Radium Company of America: Radium Bromide, Radium Chloride, Radium Sulphate.

Standard Chemical Company: Radium Carbonate.

Clinical Evidence: In view of the unsatisfactory evidence for the therapeutic value of articles proposed for inclusion with New and Nonofficial Remedies, the Council adopted the following statement:

"Claims are often made, however, which are incompatible with common experience and sometimes defy the laws of Nature. Claims which seem highly improbable will not be admitted by the Council unless the manufacturer supports them by evidence acceptable to the Council. In doubtful cases the Council acts on these questions under the advice, and with the cooperation, of its staff of clinical consultants."

Change of Formula: In view of information received from the Antiseptic Supply Company the Council has modified the description of Cupriesticks to indicate that these are tipped with a mixture of copper sulphate, alum and potassium nitrate, containing 20 to 25 per cent. of copper sulphate.

Pituitary Liquid: Armour and Company have informed the Council that its Pituitary

Liquid is adjusted to uniform strength by the method of G. B. Roth (*Jour. of Pharm. and Exper. Thera.*, July, 1914). The description of Pituitary Liquid, Armour, has been revised to indicate this.

THOSE Chicago physicians who are not contented unless creating disturbance of one kind or another should realize that their unceasing warfare against all that stands for decency and medical progress does not pay in the long run. From one end of the country to the other there is a general objection to plans of giving Chicago the benefit of any of the favors that can be bestowed by the medical profession as a whole. First, there were loud objections to making Chicago the home of the American College of Surgeons, and the ultimate result was that Washington was given the plum. Now there is a cry from different quarters to take the home of the American Medical Association from Chicago. Can it be that these signs of the general feeling that pervades the medical profession will go unheeded by even the rankest of disturbers in Chicago? There are in Chicago a large number of very capable, conscientious, and ethical medical men who do not approve of the warring attitude of some of their confreres, but, as is the case elsewhere, such men are busy with their professional work and they have neither the time nor the inclination to dabble in the squabbles and political intrigues that characterize the efforts of certain medical gentlemen who are never contented unless they are upsetting the usual order of things. Unfortunately there are enough of the rank and file in the medical profession who temporarily listen to the specious arguments of the demagogues of the medical profession, and in consequence objectionable policies sometimes prevail to the discredit and great detriment of the profession as a whole. Eventually right and justice prevails, but often times not until damage has been done that it takes years to correct. The Chicago medical profession as a whole is paying the penalty for the errors of some of its erstwhile leaders, and it is unfortunate that the innocent must suffer along with the guilty.

ZION CITY, ILL., has met the fate that awaits all blatant and defiant ignorance in this twentieth century. Infected with small-pox, the town at first, under the direction of the absurd religious dictator, named Voliva, refused vaccination and proceeded by the ancient methods of incantation and supplication to attempt to stay the plague—meanwhile issuing proclamations of villification concerning "doctors, drugs and

devils." Medieval methods failing, modern science intervened in the person of the representative of the Illinois State Board of Health, "a square-jawed inspector," Dr. C. E. Crawford. Now, what does Zion City pay for its ignorance and its besotted devotion to an emotional superstition? This, according to the news reports:

The first act of the new overlord was to authorize the mayor of the city, W. Hurd Clendinen, to issue a proclamation instituting a rigid quarantine on the premises of all persons afflicted with small-pox. He then swore in six deputy inspectors to assist him in maintaining the quarantine.

The proclamation makes it the duty of all persons having knowledge of suspicious cases to report them at once. All persons afflicted must be taken to the abandoned schoolhouse used as an isolation hospital. All persons exposed will be quarantined for twenty days. All public gatherings are prohibited, there must be no canvassing from house to house, and all children under 16 years of age must remain at home. Violations are punishable by heavy fine or imprisonment.

The provision against public meetings is expected to interfere with the weekly religious meetings of the followers of Zion. Numerous social affairs planned by the young people of the town have been abandoned under protest.

The workers in the Zion lace industries, the National Office Supply Company and F. B. Cook & Company's electrical works, aggregating nearly one thousand, are being vaccinated, provided they are willing.

The first week in November saw a total of about fifty cases in this absurd town, which was to be perfectly healthy because it had no tobacco or pigs. What the toll in lives will be it is impossible to say, as the trouble is not over yet—but, of course, this incident will make no more impression on your dyed-in-the-wool anti-vaccinationist than similar incidents have in the past. Immovable since 1798, they still live in the era of the snuff box, the post chaise and the sailing ship, wear red flannels and drop breast milk into inflamed eyes.—*Lancet-Clinic*, Nov. 21, 1914.

POLITICS VERSUS HEALTH.—We are in receipt of a letter from Dr. Charles Gruber of Fort Wayne, Ind., informing us that the mayor of that city had deposed Dr. Gillie, a competent veterinarian, from the position of meat and dairy inspector and appointed in his place a drug clerk, who has no experience whatever in the work he is expected to do. As far as we have learned, there was no reason except political for Dr. Gillie's removal, as he is well qualified by training and experience and had performed the duties of his position to the satisfaction of all

concerned. The drug clerk in question may be a competent pharmacist and a respectable citizen, but these attributes hardly make him available timber for a position such as meat and dairy inspector, where expert knowledge especially is needed. We have an idea that the gentleman in question probably dabbles in politics and has a "pull" with the powers that be, and as the position pays \$1,500 a year, the reason for his appointment is self-evident to many. Those who favored this appointment perhaps will advance the argument that, being a drug clerk, his special knowledge of chemistry and possible ability to make milk analyses fit him for the work; but those who know will agree that milk analysis is only a small part of the requirements, and can be, and usually is done by the Board of Health laboratory; and, anyway, if a man is properly performing the general duties of meat and dairy inspector for a city the size of Fort Wayne, he will not have the time to make such analyses himself. It is the policy of *The Bulletin of Comparative Medicine and Surgery* to refrain from discussing politics, except as it pertains to matters of public health, and as we do not even know the political faith of the Fort Wayne city administration we trust no one will be so narrow as to attribute these strictures to partisanship. It is the duty of all citizens, and especially members of the medical and allied professions, to criticise severely any public official who allows political expediency to control appointments relating to the public health. The federal government, the states and practically all municipalities have long ago come to the same conclusion—that it does not pay from any angle to mix politics and health matters, and it is particularly reprehensible that the valiant efforts of the health officials of the State of Indiana, which stands in the foremost rank in matters of public health and sanitation, should be antagonized thus, especially at this time, when as never before all classes of the body politic are striving to aid in disease prevention; and there is nothing, as is well known, more apt to produce disease than bad foodstuffs and milk. This appointment is open to severe censure, not only because it affects the well-being of the citizens of a given community, but because it is a decided step backward and creates a vicious precedent, which, if allowed to go unreprimanded, is apt to be followed by others having like appointive powers whose sole purpose is not the appointment of those best qualified to serve the people, but the appointment of those best qualified to aid in building up a personal political machine. —A. S. Jaeger, *The Bulletin of Comparative Medicine and Surgery*, Nov. 15, 1914.

DEATHS

CHARLES E. PATRICK, M.D., died at Seymour November 16, aged 71 years.

T. M. HOWARD, M. D., died at his home at Boonville, November 17, aged 68 years.

CHARLES R. CROW, M.D., died at his home in Indianapolis November 27, aged 62 years.

WILLIAM H. SMITH, M.D., of Rushville, died November 10 of heart disease, aged 81 years.

T. W. BOTKIN, M.D., died of paralysis November 17 at his home in Farmland, aged 70 years.

MRS. SOPHRONIA OSENBACH, wife of Dr. William Osenbach of Indianapolis, died November 25.

GEORGE W. DEWESEE, M.D., of Fredericksburg, died suddenly November 3 of heart trouble, aged 76 years.

MRS. DEBORAH MURDOCK SLEEPER, widow of Dr. William A. Sleeper, died November 19 at Fowler, Ind., aged 87 years.

P. E. STOCKHARDT, M.D., former Elwood physician, ended his life at the Central Hospital for the Insane at Indianapolis, November 17.

SAMUEL P. BRUNDIGE, M.D., physician and druggist, died November 9 at his home in Marion following a stroke of paralysis, aged 76 years.

JOHN H. MCCURTHAN, M.D., formerly of Evansville, but for the past ten years confined at the Southern Indiana Insane Hospital, died November 7, aged 45 years.

CHARLES I. STOTELMEYER, M.D., of Hagers-town, died November 12 at the Reid Memorial Hospital, Richmond, following an operation for cancer of the liver. Deceased was 58 years of age.

MARSHALL T. SHIVELY, M.D., died at his home in Marion November 23 after a long illness from paralysis, aged 65 years. Dr. Shively was born in Marion, 1849, attended school in Marion, graduated from the Ohio Medical College, Cincinnati, 1872, and immediately began the practice of medicine with his father, James S. Shively. He was a member of the Grant County Medical Society and the Indiana State Medical Association.

WILLIAM A. HEWINS, M.D., of Chandler, died November 30, aged 64 years. Dr. Hewins was a member of the Warrick County Medical Society, Indiana State Medical Association and the American Medical Association.

SILAS HALL, M.D., of Vincennes, died October 29 at Woodmere Hospital, Evansville, after an illness of several years from Bright's Disease, aged 65 years. He was a member of the Knox County Medical Society and the Indiana State Medical Association.

BENJAMIN F. WHITMER, M.D., of Goshen, died November 22, aged 77 years. Dr. Whitmer was born at Selins Grove, Pa., Jan. 18, 1838, and received his medical education at the Jefferson Medical College, Philadelphia. He was a member of the Elkhart County Medical Society and the Indiana State Medical Association.

ZACHARY TAYLOR FUNK, M.D., one of the oldest physicians of Corydon, and veteran of the Civil War, died at his home in Corydon after an illness of five years duration on November 19. He was born near Milltown, Ind., June 29, 1847, and was a graduate of the Kentucky School of Medicine, 1876. He was at one time president of the Harrison County Medical Society, a member of the Board of Pension Examiners, and served his county as treasurer.

STEPHEN HUNT, M.D., died November 8 at his home in Coatesville, aged 69 years, from apoplexy. He was born at Friendship, N. C., June 17, 1845, graduated from Asbury College (now DePauw) and Rush Medical College, Chicago, and practiced medicine continuously at Coatesville since 1880 with the exception of one year spent at Terre Haute. He was a member of the Hendricks County Medical Society and the Indiana State Medical Association.

JOHN H. MCCUTCHAN, M.D., of Evansville, died November 7 after an illness of six years, aged 40 years. Dr. McCutchan was born near McCutchanville in 1870, attended the McCutchanville schools, Hornbrook's Preparatory School at Evansville, graduated from Starling College, Columbus, Ohio, and studied at the New York Polyclinic Institute. He was an intern at St. Mary's Hospital, and later practiced medicine with Dr. A. M. Hayden. He was an active member of the Vanderburg County Medical Society, Indiana State Medical Association and American Medical Association previous to his illness of the past six years.

NEWS NOTES AND PERSONALS**INDIANAPOLIS**

DR. DEVANEY is spending a couple of weeks in Wisconsin in quest of big game.

DR. LOUIS BURKHARDT has been to Baltimore spending some time in the Johns Hopkins Hospital Clinics.

DR. CHARLES A. PFAFFLIN has returned to Indianapolis, having spent some months in Berlin.

DR. THOMAS L. SULLIVAN, democrat, has been appointed superintendent of the City Hospital to succeed Dr. John Sluss, republican.

DR. M. J. SPENCER, democrat, has been appointed police surgeon to succeed Dr. Thomas L. Sullivan, recently elevated to the superintendency of the City Hospital.

OWING to the war against the illegal sale of drugs in Indiana the state board of pharmacy has caused the arrest of many men in Indianapolis and other places charged with selling heroin and cocain.

THE war department has assigned a special instructor, Maj. M. A. W. Shockley, for the medical department of the Indiana National Guard. Major Shockley will also have charge of the medical department as instructor of Ohio, Kentucky, Michigan and West Virginia.

DR. EDENHARTER and his medical staff of the Central Indiana Hospital for the Insane were the hosts of the Seventh District Medical Society. In addition to a good program, lunch was served and an hour's time spent in the big gymnasium. It was an unusually pleasant and profitable meeting.

THE Sisters of Charity (colored), Indianapolis, have raised nearly ten thousand dollars for the purchase of hospital property which is to be used for the colored people. The property will cost about \$20,000. There is no hospital for the colored race in Indianapolis, except the City Hospital.

DR. W. F. COGSWELL, state health commissioner of Montana, and W. M. Cobleigh, state

chemist of Montana, were visitors in Indianapolis recently. They conferred with Dr. J. N. Hurty and H. E. Barnard of the state board of health and inspected the filtration plant of the Indianapolis Water Company, the city's experimental sewage disposal plant and the Polk Milk plant.

THE two new units of the City Hospital as a result of a bequest of \$250,000 by Alfred Burdsal was dedicated Saturday evening, November 28. Addresses were made by Mayor Bell, W. L. Taylor, Rev. Lewis Brown and Dr. C. H. L. Reed of Cincinnati. Mention should be made of the unique and very attractive mural decorations of the wards by local artists who through the activities of St. Margaret's Hospital Guild donated their services for this excellent work. The new addition will add about 120 beds for medical and children's diseases to the capacity of the hospital.

GENERAL

DR. J. M. MILLER has been appointed on the Board of Pension Examiners at Decatur.

DR. CHARLES B. COLLINS of Jacksonville has been elected coroner of Greene County.

A FREE medical dispensary was opened at the Campbell Settlement House, Gary, November 16.

DR. C. L. AMICK has sold his practice at Fillmore to Dr. T. C. Louks of Seelyville, and has located at Wakarusa.

DRS. J. D. AND C. C. SOURWINE of Brazil have opened to the public a modern and up-to-date hospital in that city.

DR. L. W. D. JERMAN of Newpoint has been under treatment at the Protestant Deaconess Hospital, Indianapolis.

DR. BENJAMIN S. WHITE of Greensburg was married November 17 to Mrs. Elizabeth McConnell of the same place.

DR. E. O. DANIELS of Marion has gone to Cambridge, Mass., to take postgraduate work at the Harvard Medical School.

DR. CHARLES P. COOK of New Albany was operated on November 26 for appendicitis, and is making a satisfactory recovery.

A GIFT of \$100,000 has been made to the Boston University School of Medicine for the establishment of a maternity hospital.

DR. T. J. SHACKELFORD of Warsaw, who has been at the Presbyterian Hospital in Chicago, is much improved and has returned home.

DR. NELLIE COLE REED has been appointed health supervisor of the Michigan City public schools, and she began her work December 1.

DR. SAMUEL C. MURPHY, who has practiced medicine for some years at Claypool, has located at Warsaw, and will continue his practice in that city.

DR. A. G. CHITTICK has been appointed City Health Officer of Frankfort to succeed Dr. G. W. Brown, whose resignation had just been tendered.

DR. S. M. GOLDBERGER of East Chicago was recently married to Miss Flora Levy of Chicago. The marriage took place at the Ashland Club, Chicago.

DR. L. H. HARRISON of Butler has been in very poor health for several months, and has now gone to a sanitarium for treatment and recuperation.

DR. URBAN A. LYLE, who for the past twelve years has been located at Lafayette, has gone to Logansport, where he will engage in the practice of his profession.

MRS. MARIA LORD, aged 56, wife of Dr. William A. Lord of Mays, drank concentrated lye with suicidal intent October 27 and died two days later from the effects.

DR. F. H. HEMPHILL of Rensselaer, who has been spending several weeks in the West, principally Missouri and Iowa, for his health, has returned home greatly improved.

THE new Gary General Hospital was opened to the public November 24. The new building is finished in white enamel, is equipped with latest improvements, will accommodate thirty-six patients, and has a training school for nurses in connection.

DR. PAUL E. BOWERS of Michigan City, physician in charge of Indiana State Prison, is delivering a series of lectures on "Clinical Criminology" at Valparaiso University.

DR. R. H. STENGER of Broad Ripple has been appointed on the staff of physicians at the South-eastern Hospital for the Insane at Madison, and has taken up his new duties at once.

PAY your dues NOW while you think of it. The amount is small; it has to be paid but once a year; and there is no reason why you should go on the delinquent list on February 1.

DR. JAMES H. CARNELLY has sold his practice at Kokomo to Dr. G. P. Evans of Charleston, W. Va., and moved to Ludington, Mich., where he will continue the practice of medicine.

DR. F. B. ROBISON, who has practiced medicine at Monticello for nearly fifty years, has retired from active practice and is moving with his family to Coldwater, Mich., where his daughter is located.

THE physicians of Kendallville have organized themselves into the Kendallville Medical Society. Dr. C. A. Gardner is president; Dr. C. B. Goodwin, vice-president, and Dr. H. O. Williams secretary-treasurer.

THE semi-annual meeting of the medical section of the American Life Convention will be held at French Lick Springs March 3 to 5, 1915. Dr. Frank W. Foxworthy is chairman of the program committee.

THE Grandview Sanitarium, Cincinnati, which has been in charge of the late Dr. Brooks F. Beebe, has been purchased by Dr. J. M. Ratliff, until recently superintendent of the Dayton State Hospital for the Insane.

A RESOLUTION providing for the founding of an American College of Physicians was an important feature of the sixth annual meeting of the American Association for Clinical Research held recently at Baltimore.

CLARK COUNTY has organized a society for the Study and Prevention of Tuberculosis at Jeffersonville. The society will control the funds raised by the sale of Red Cross seals and expects to institute public nursing and medical inspection of schoolchildren.

THE Academy of Medicine of Logansport has been incorporated under the laws of the state of Indiana. This organization is for the purpose of aiding the physicians of Cass County in investigation and research work.

DR. J. W. DUNFEE, who has practiced medicine for the past seventeen years at Etna Green, has opened an office at Plymouth. Dr. Charles L. Loomis of LaPorte has taken over Dr. Dunfee's practice at Etna Green.

THE forty-second annual meeting of the American Public Health Association was held in Jacksonville, Fla., November 30 to December 4. The National Mouth Hygiene Association also met at Jacksonville this same week.

THE Northern Tri-State Medical Association will hold their Forty-First Semi-Annual Meeting at the Century Club, Elkhart, Ind., Jan. 12, 1915. James A. Duncan of Toledo, Ohio, is president, and George W. Spohn of Elkhart is secretary.

DR. PAUL F. CLARK, a noted bacteriologist, now associated with Dr. Simon Flexner of the Rockefeller Institute of Medical Research, has been named to succeed Dr. M. P. Ravenel as associate professor in charge of medical bacteriological courses at the University of Wisconsin.

THE Rockefeller Hookworm Commission has established a station on the Isthmus of Panama for systematic work against hookworm, which seems to prevail to an alarming degree. Of the first 1,000 persons examined at the laboratory, more than 700 were found to be harboring hookworm.

CHARLES SEDGWICK MINOT, professor of comparative anatomy at Harvard University and director of the anatomic laboratories, author of several works on embryology, and inventor of two widely used forms of microtomes, died at his home in Milton, Mass., near Boston, November 19.

THE following officers were elected at the annual meeting of the Ohio Valley Medical Association held at Evansville, November 4 and 5: President, E. O. Smith, Cincinnati; first vice-president, G. M. Young, Evansville; second vice-president, William Shimer, Indianapolis; third vice-president, William Horsa, Chicago; secretary-treasurer, Benjamin Floyd, Evansville.

DR. F. L. PYKE, who has just completed a course as intern at St. Vincent's Hospital, Indianapolis, has opened offices in the Ross Building, Lafayette, for the practice of medicine and surgery. Dr. Pyke is the son of the late Dr. A. D. Pyke, who was a practicing physician in Tippecanoe County for many years.

THE Executive Committee of the Local Committee on Arrangements for the next annual session of the American Medical Association to be held June 22-25, 1915, in San Francisco, is as follows: Dr. Herbert C. Moffitt, chairman; Dr. Solomon Hyman, secretary; and Drs. Emmet Rixford, George B. Somers, J. Henry Barbat, William P. Lucas, and Philip Mills Jones, all of San Francisco.

DR. W. H. MCGAUGHEY of Greencastle was elected president of the Association of Big Four Railway Surgeons, New York Central Lines, at the twentieth annual meeting of the organization held at Indianapolis November 12. Dr. John C. Sexton of Rushville was elected first vice-president, Dr. H. I. Nelson, Hudson, Mich., second vice-president and Dr. L. A. Ensminger, Indianapolis, (re-elected) secretary-treasurer.

THE Indiana State Board of Health held its quarterly meeting at Indianapolis October 9. It ordered the city of Indianapolis, under the statutes provided, to present plans and specifications before Jan. 1, 1915, for a public destruction and filtration plant for the sewage of the city. The board also issued an order commanding the city of Lebanon to put in septic tanks and filter beds sufficient to destroy its sewage, which at the present time is discharged into Prairie Creek.

AT the opening of the Good Samaritan Hospital, Kokomo, on November 5, a surgical clinic was held, in charge of Dr. M. I. Rosenthal and Dr. Philip Titus of Fort Wayne, and Dr. Edgar Cox, of Kokomo. The following was the program: Umbilical Herniotomy, Appendectomy, Abdominal Hysterectomy for Fibroid, Thyroidectomy, Perineorrhaphy, Amputation of Cervix and Repair of Perineum, Inguinal Herniotomy, Repair of Perineum, Amputation of Cervix, Thyroidectomy. Fifty doctors were in attendance.

SOME of the Indiana cattle have been found to be suffering from the foot-and-mouth disease, and the United States government officials are establishing rigid quarantine about the infected farms and killing the herds that are affected

with the disease. Some of the people have been considerably frightened over the prospect of contracting the disease, but their fears have been allayed by the statement issued by the Department of Agriculture to the effect that the foot-and-mouth disease is confined almost exclusively to cattle. The report should have added that a certain number of people are affected with the "mouth" disease, but there is no cure for it, and fortunately it is not contagious or infectious.

CORRESPONDENCE

COMPLIMENT FOR THE INDIANA MEDICAL PROFESSION

THE JOURNAL is in receipt of the following letter from an officer of one of the state medical societies to whom THE JOURNAL has been sent complimentary:

Passaic, N. J., Nov. 21, 1914.

To the Editor:—For a few months past I have been the recipient of your publication, THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION, and wish to thank you for the favor. Your editorials are sane and helpful, and I have formed a very high opinion of the medical men of your state from reading their papers in your journal.

Very truly yours,

GEORGE T. WELCH.

DISCOURAGING INCIDENTS IN MEDICAL PRACTICE

Terre Haute, Ind., Nov. 27, 1914.

To the Editor:—I have read the editorial by Dr. H. H. Martin entitled "Why Protect the Incompetent and the Knave in the Medical Profession" with great interest, and wish to express my sympathy with the sentiments which he expressed.

The circumstances he criticises are among the most objectionable and discouraging connected with the practice of medicine and should command the serious attention of the advanced members of our profession.

Yours truly,

GEORGE T. JOHNSON.

FIXED PLACE FOR THE SESSIONS OF THE ASSOCIATION

Alexandria, Ind., Nov. 12, 1914.

To the Editor:—I attended the Lafayette session of the Indiana State Medical Association, and, while I was pleased with the scientific part, I was very much disappointed with the general

arrangements for the session. What is the object of holding our sessions in the smaller cities of the state? I had supposed that it was to give the members of the Association an opportunity to see the state, and especially the respective cities; but how are we going to see the cities and the doctors of those cities under the present arrangement? I saw neither Lafayette as a city nor its environments, and I was especially anxious to see the Purdue University, the Soldiers' Home, etc. Unless the physicians of the city where the Association holds its session sees fit to go to the trouble and expense of furnishing a committee and facilities for showing the visiting physicians the schools, hospitals and other features worth seeing, I for one am in favor of holding all our sessions in Indianapolis, which is centrally located and offers shopping facilities, etc. We should not have the idea that all of our members are old-timers who are acquainted with every city of the state, and who are interested only in having a good time. Outsiders and the younger members should be considered. I for one am willing to forego all smokers, banquets and other social entertainments for the opportunity of seeing the city and surrounding country.

This is simply a suggestion, but I hope it will be considered in connection with our future sessions.

Yours fraternally,

L. F. SCHMAUSS.

SOCIETY PROCEEDINGS

INDIANAPOLIS MEDICAL SOCIETY

Meeting of Nov. 10, 1914, Hotel Washington

Meeting called to order by the president. Minutes read and approved. The application of Dr. G. D. Mottier was read second time. Attendance 84.

Program: Dr. W. F. Hughes read a paper on "The Eye in Relation to Lighting Systems."

The chief results of bad lighting systems are shown in a loss of efficiency both immediate and remote, and discomfort. Practically all lighting systems use daylight, direct or indirect systems, or a combination of these. Proper diffuseness with sufficient intensity to give maximum detail seems to be the proper goal from the standpoint of comfort and welfare of the eye. The loss of efficiency seems to be due chiefly to fatigue of the muscular apparatus as the response of the retina to light stimuli is only slightly affected. The quantity, quality and distribution should receive careful consideration in all lighting plans. In defective illumination, the distribution of light is commonly the attribute at fault. Present experimentation seems to show that with the diffusion effects secured in most lighting systems too much light is used for the welfare of the eye. The great increase of artificial illumination, often producing distinctly harmful effects on the eyes, demand a

closer cooperation between lighting engineers and oculists for the standardization of lighting systems, primarily on the bases of the effect on the eye.

Dr. J. V. Reed presented two cases on the "Albee Operation for Tuberculosis of the Spine."

CASE 1.—Mr. L. Suffering from a complete paraplegia, operated December, 1913. The graft was taken out of the tibia and transplanted in the dorsal spine in the region of the diseased bone. Return of function was rapid and in three months the patient was able to walk. At the present time he is practically well except for a weakness in the spinal muscles. At the present time he is walking normally, but wears a leather jacket to support his spine.

CASE 2.—Mr. W., complete paralysis of legs, arms and sphincters. Marked pulmonary tuberculosis, operation, August, 1914. A tibial splint was transplanted in the lower cervical region at the site of the disease. After a week or ten days, motion had returned to the arms to some extent and the sphincters regained part of their functions. The pulmonary condition, however, progressed and two months following the operation, the patient died of pulmonary tuberculosis.

DISCUSSION

Dr. Marshall: Effect of ultra violet rays are seen on those who climb glaziers. Glazier blindness results. The ordinary lights pass through normal route, and as a rule produce no pathologic results. Architects have studied more scientifically—at least more practically, until our factories are better lighted than our homes and churches.

Dr. Sharp: Quality of light concerns us most. A camera turned away from sun's rays takes a good picture, turned toward the sun produces no picture or a poor one. We don't often see a burnt cornea from these rays, but often a disturbed retina. A person with an ametropic eye does not suffer so much. Ophthalmologists know little about certain lights, but know effects perfectly. The men who make many lights know them perfectly but little about effects.

Dr. Ross: Saw Dr. Albee do this operation. Albee advises operation as it acts as a splint for the spine, lessens time of recovery, prevents recurrence, stops further deformity and corrects that already present. Cited two cases:

CASE 1.—Girl, 14 years, operated Oct. 1, 1913. Completely paralyzed. Now has complete control of bladder and rectum, can move lower extremities.

CASE 2.—Man, 45 years, operated March 21, 1914, completely paralyzed. Now can walk with some assistance.

Bone infected with tuberculosis does not regenerate. Almost immediate union takes place between graft and spine. Four weeks solid bone is formed.

Dr. Mumford: The Albee operation is not a cure for tuberculous spine in itself, just an external splint, and building up must play a part. After-treatment is very important. An essential is to include two vertebra above and below. Albee for all ages is a question. Grafts do not act as splints at first and do not have to be in one piece. Some think small pieces are better. Nutrition is the dependable thing.

Dr. Heath: Illumination question was the important thing in Dr. Hughes' paper. The paper is a practical one on a practical subject.

Dr. Allen opposed the Albee operation and advocated braces for Pott's disease.

Dr. J. R. Eastman: I appreciate the pioneering of Drs. Ross and Mumford in the bone transplant. Dr. Hughes' paper on "Lighting Systems" should make an impression on us, especially in surgery. My operating room is a gray. It seems better for my eyes. Psoas abscesses are often opened to advantage. Cited cases opened in posterior mediastinum with recovery. Dr. Albee has also done work for talipes equinus in bone transplant.

Dr. Tomlin called attention to calcium chlorid deposits in assisting bone transplant.

Dr. Reed in closing said he would not operate every case of Pott's disease.

Meeting adjourned.

ALFRED HENRY, Secretary-Treasurer.

Meeting of Nov. 17, 1914, Washington Hotel

Meeting called to order by the President. Minutes read and approved. The Secretary read an invitation from Indiana State Dental Society to attend a memorial meeting to commemorate Dr. George Edwin Hunt, who died July 11, 1914. The society voted to accept the invitation. Attendance 78.

Program: By invitation, State Veterinarian Dr. A. F. Nelson was present and gave a talk on the hoof-and-mouth disease. He concluded by asking for questions, many of which were asked by the society members. Many points were cleared up.

Dr. W. D. Gatch read a paper on "Gunshot Wounds of the Chest and Abdomen" and gave clinical reports of sixteen cases. Three of these had wounds of the chest complicated by large hemothorax which recovered completely under expectant treatment. The remaining thirteen cases all had wounds of the abdomen, in several cases complicated by thoracic wounds as well. The abdominal cases were noteworthy on account of the grave character of the visceral lesions in many cases. Six intestinal anastomoses had been done on five of these patients. In two cases the wound was confined entirely to the liver. In eleven cases in which the wound was below the level of the liver some part of the gastro-intestinal canal was punctured in every case but one. The cases were all operated on immediately after the receipt of the injury and the results give an approximate idea of what may be accomplished by early operation in these cases. It was concluded that the prognosis in case of gunshot wound of the abdomen depends almost entirely on the amount of hemorrhage and of the injury to important blood-vessels. Almost any injury to the gastro-intestinal tract can be successfully repaired provided the patient is operated on before peritonitis has developed. Of the thirteen abdominal cases five died and eight recovered.

DISCUSSION

Dr. Kemper: Last four cases involved the liver. The question with me is whether to use Fowler's position. Thorough flushing by normal salt of entire abdomen is imperative. After-treatment is the greatest question. Starving is unsatisfactory. Rectal feeding scarcely supports. Should normal salt solution be used extensively intravenously? Of course there is a higher mortality from upper visceral injuries.

Dr. Pantzer: Many cases of gunshot wounds do not manifest any symptoms warranting opening the abdomen. Cited a case where a 22-caliber bullet pierced the bowel eleven times. By closing all the boy made

a good recovery. When there is no extravasation do not flush abdominal cavity.

Dr. Reed: Lateral anastomosis does not seem the better, but rather the end-to-end anastomosis.

Dr. Noble: Two things to consider. Hemorrhage primarily and infection secondarily. All our methods of stopping hemorrhage at times are inadequate. More especially in spleen and liver. Spleen is often removed and liver packed. Saved spleen in three cases by placing gauze around the organ and producing pressure, thus stopping hemorrhage. The same method saved a case of liver injury.

Dr. Wells: Relative to military surgery will say that all military surgeons do not do surgery. He must be a soldier or military man. He must know something about all departments of the army. Military surgeons are criticised unjustly. Many disadvantages obtain on battlefield. Expectant treatment is very popular.

Dr. Jobes: Until the last few years there were few recoveries. Diagnosis is the important thing. Most of my cases have been free from symptoms. I have used little salt solution in abdominal cavity. Sponging has been my practice.

Dr. McKinstry: Thorough exploration is the great thing in gunshot wounds.

Dr. O. G. Pfaff: Called attention to technic. To prevent excessive trauma in closing many perforations drainage would be better. Cited a case of eight perforations in which drainage was used and none closed. Recovery.

Dr. Hadley: Seriousness of gunshot wounds depends on injury to blood-vessels rather than to injury to intestine or stomach.

Dr. Gatch in closing stated that a lateral anastomosis was safer than end-to-end anastomosis on account of less disturbance to circulation. Not so apt to cut off nutrition.

Meeting adjourned.

ALFRED HENRY, Secretary-Treasurer.

Meeting of Nov. 24, 1914, Hotel Washington

Meeting called to order by the president. Minutes of previous meeting read and approved. Application of Dr. C. K. Jones was read second time and that of Dr. Virgil H. Moon first time.

Program: Paper, "Clinical Aspects of Colon Stasis," Dr. J. Rilus Eastman.

Properly performed short-circuiting operations by the improved drainage which they provide relieve chronic colitis and indirectly affect favorably the other factors of stasis, ptosis and peritonitis. The feces are to a considerable extent made up of epithelial debris, intestinal secretions and dead and living bacteria, and these things mixed with food residue under the influence of contractions of the cecum rise in the ascending colon. But this contraction is not constant. The empty cecum is in repose; it does not contract. It is only awakened when the small intestine empties into the cecum its liquid contents. If contractions are not produced in this way, the feces have no tendency to be evacuated. The colon becomes lazy and atonic and obstipation is increased by antiperistalsis. It is for this reason that ileosigmoidostomy may be said to be conceived falsely. By this operation the liquid contents of the small intestine are not permitted to enter the cecum to bring about contraction. It is for this reason that Lane and others have been obliged to reoperate after ileosigmoidostomy

and deal with an enormous fecal accumulation in the cecum and ascending colon. Typhlosigmoidostomy or typhloproctostomy are not open to the above criticisms, for in these operations the fluid contents of the small intestine are permitted to enter the cecum. Bergmann first anastomosed the cecum to the sigmoid of volvulus of the ascending colon and the operation in cases of stasis is not indicated unless membranes or adhesions so fetter the colon as to make such an exclusion necessary because of incompetency or obstruction.

DISCUSSION

Dr. Foreman: Intestinal stasis does harm only in so far as there is intestinal toxemia, and if there be no intestinal toxemia then there is no indication for operation. The surgeon's idea is to correct the mechanics of the bowel and thereby cure the stasis and toxemia. Time has proved that a goodly number of the cases operated on for intestinal stasis have returned to the internist with symptoms similar to these preceding the operation. The internist considers that the great majority of cases of intestinal stasis are functional, i. e., there is no real or organic obstruction. He considers that there are various elements entering into the cause of alimentary stasis and toxemia other than simple mechanics of the bowel, that intestinal stasis may and does frequently occur without toxemia, and even alimentary toxemia may and does occur without stasis. The primary thing in intestinal toxemia is not stasis, ptosis, colitis or peri-intestinal membranes, bands and adhesions, but intestinal bacterial food poisons and intestinal bacterial infection. Surgical or mechanical drainage does not relieve the cause of intestinal toxemia, but only removes a condition which may aggravate the cause. Of the anastomotic operations for intestinal stasis I thoroughly concur with the essayist in that typhlosigmoidostomy or typhloproctostomy is the one of choice, and that ileosigmoidostomy is a very dangerous procedure, and that colectomies either partial or complete are very exceptional if ever indicated.

Dr. Noble: This field is uncertain. Intestinal blockage is old. I have never had brought before me a definite description of a set of symptoms or set of pathologic processes satisfactory to me, notwithstanding we have done short circuiting several times. The individual must be considered in his entirety before such an undertaking. We find things at head of colon which are not functional but merely organic. No surgeon can connect ileum and colon equal to ileocecal valve. Nature has done her work when the alimentary content reaches the colon. The colon is merely a peculiarly shaped receptacle. Surgeons may handle the symptoms arising therefrom as they see fit.

Dr. Kimberlin: Many of these cases had trouble when babies, usually bottle babies. They have visited nose and throat men. They are nervous, slender, pale, flat chested, shallow breathers. There is a general tendency toward physical degeneration. Medical and surgical men do not succeed. Research men have nothing to tell us. I believe the question is a biological one.

Dr. Sterne: There is nothing moved in the body by gravity. Everything is propelled. Then it makes no difference what position an organ is in. Surgery is a necessary recourse where there are demonstrable obstructive tissues. There is no operation that successfully closes the pylorus.

Dr. A. B. Graham: Dr. Eastman would not have you believe that every case should be operated. I have never been able to determine why the term stasis was ever coined. The roentgenologists now speak of true and pseudo stasis. We have the terms constipation and obstipation and feel that pseudostasis and true stasis are synonymous with these two. Constipation and pseudostasis are benign and medical in character; obstipation and true stasis are organic and require surgery for their relief. My results from the short-circuiting operation are not so good as those reported by Dr. Noble. I have performed this operation on two patients and both are, if anything, worse than they were previous to operation. I cannot understand Dr. Noble's results since in my cases the technic followed was one advised by him.

Meeting adjourned.

ALFRED HENRY, Secretary-Treasurer.

FORT WAYNE MEDICAL SOCIETY

Meeting of Feb. 17, 1914

Society met in regular session in the assembly room of the Courthouse with nineteen members present. Minutes of preceding meeting read and approved.

Clinical cases:

Dr. Rothchild gave further history of the case of the child reported several meetings ago with acetouria; saw child next day; ordered calomel and sodium bicarbonate; child voided a little urine; negative microscopically; no albumin or sugar; passed some pin worms; following day developed very marked case of varicella.

Dr. Porter reported the following case: Male 42 years of age; alleged illness due to an injury; at present suing to recover damages; never was ill until injury of two years ago; has good family and personal history; two years ago was struck by an automobile; was not thrown out of car; was not unconscious; following day had lame right shoulder and few bruises over body surface; general strength has improved but complains of muscular weakness and nervous trembling; has coarse tremor of hands and arms, face and neck; all reflexes negative; no palpable goiter; pulse 100 at rest; temporal and radial arteries nodular; blood-pressure 160 mm.; aortic second sound accentuated; no hypertrophy; no murmurs; no edema; has had since injury, never before, severe headaches; has no trouble with vision except that sometimes objects blur; examination of spine and nerve roots negative; blood normal; urine 1026; no acetone; no diacetic; no casts or albumin; a trace of sugar; this specimen was taken two hours after a meal. I do not think this man is a malingerer and I think there is no connection between his illness and his injury.

Dr. Porter also reported a case history of a case of tuberculous peritonitis.

DISCUSSION

Dr. Bruggeman: It seems to me that there is some connection between this man's illness and the accident. In this regard, if one were to have a fracture or other anatomic injury, and the same symptoms supervene following the accident, it could be styled a case of traumatic neurosis. How many cases of tuberculous peritonitis are walking around without the aid of either surgical or medical treatment? Many of these cases get well without treatment.

Dr. B. Van Sweringen: Would this man be in the same condition if he had not met with an injury? I have had some very queer cases of tuberculous peritonitis. I remember one case sent to me from a neighboring town with symptoms similar to the exaggerated nausea and vomiting of pregnancy. This woman had missed a menstrual period. On examination the mass was felt in the left broad ligament which was taken to be an ectopic gestation; unruptured; patient taken to hospital and operated; operation revealed tuberculous peritonitis with probable primary focus in the tube. A young girl of 16 years of age had acute abdominal symptoms resembling acute appendicitis; abdomen was opened, revealing acute tuberculous peritonitis; drainage instituted; prompt recovery ensued. In another case a part of the bowel was stripped of the mesentery in attempting to take out the tuberculous focus. A fecal fistula developed in this case and death very promptly followed. I remember a case given up as hopeless after laparotomy for tuberculous peritonitis. Recovery took place and she is living now and in fairly good condition.

Dr. Porter, Jr.: I remember a case of railway spine and other symptoms of traumatic neurosis which developed an increased blood-pressure which never was reduced.

Dr. Weaver: I do not believe that we will ever get very far in the detection of injury with these vascular changes until a series of cases have been studied. It seems to me that this man is just at the time of life for a development of arterial change and the injury may be a factor in its production. Shock must also be taken into consideration. I was wondering if reinoculation (auto) would not be of benefit in these cases of tuberculous peritonitis with effusion such as has been done in tuberculous serofibrinous pleurisy.

Dr. Porter (in closing): If you had a lung compressed with fluid it would be in good physical condition to recover. Yet, I think that after the acute symptoms subside these cases get well better if the fluid is withdrawn. In tuberculous peritonitis unless the primary focus can be removed they are better not operated. I have not enough imagination to make a pathologic condition of this type rest on the receipt of the injury at the time of this man's accident. I know that fright and shock are often the etiologic factors in acute exophthalmic goiter.

Dr. Rothchild read a paper on "Recurrent Intestinal Obstruction."

DISCUSSION

Dr. McEvoy: I have had two interesting cases of intestinal obstruction in the same family. Child, 18 months with obstruction; had numerous attacks until she was 3 years of age; in the last attack she went into collapse and died in a few hours; post mortem showed an adhesive band in the cecal region. This band was long and made a loop of the bowel so that the small bowel was obstructed. The second child began with continuous vomiting; no abdominal condition could be made out.

Dr. Porter: I do not believe that a Meckel's diverticulum with a mesentery has ever been described. So far as the position of these diverticuli is concerned, they may occur any place from the mouth to the anus.

Dr. Weaver: It seems to me that Dr. Rothchild's case is another example of the relation of the pericolic to the embryonic type of colitis.

Dr. Porter: Pericolic is of infectious origin. A pericolic membrane is of embryonic origin most of the

time. Sometimes the pericolic membrane is of infectious or inflammatory origin.

Dr. Beall gave a preliminary report of four cases of pneumonia treated with pneumococccic vaccine.

DISCUSSION

Dr. Porter, Jr.: One of the striking things about this treatment is the numerous doses of bacteria that can be given without reaction. These organisms are really not dead. They are detoxicated.

Dr. Rothchild: The fact that salt detoxicates is evidence that in pneumonia there are less chlorids secreted.

Dr. Weaver: This treatment has been likened to the early preventive treatment of diphtheria by antitoxin. This treatment seems to be a great advance in vaccine therapy.

The application of Dr. Schermerhorn was read and referred to the Board of Censors. Communication of Mr. E. A. Wagner regarding a new type of Roentgen-ray tubing in the market was read. Adjourned.

GARRETTE VAN SWERINGEN, Secretary.

Meeting of Feb. 24, 1914

Society met in regular session in the assembly room with eleven members present. Meeting called to order by president. Minutes dispensed with.

No clinical cases.

Paper of the evening "Toxemia of Pregnancy" read by Dr. Rhamy.

DISCUSSION

Dr. Porter, Jr.: I think toxemia of pregnancy the most interesting subject in medicine, not elucidated etiologically at least. It strikes me as a most reasonable conclusion that there is always a neurotic characteristic in all disturbances of pregnancy of a toxemic type. Rapid pregnancies show a tendency to the toxemic state. As regards the laboratory end of this study the technic of urinary findings (NaOH index, etc.) is too difficult to attempt for the average practitioner. The essential change in all toxemias of pregnancy is a fatty degeneration of the liver cells.

Dr. B. Van Sweringen: As Hirst says: "When a healthy normal girl becomes pregnant the processes which go on in her anatomy must be due to the pregnancy, if that is the only change which has taken place." He had an idea that a patient who had gone through a pernicious nausea developed an immunity to further attacks, and the blood of that individual would protect another who is just going through this process. I am convinced from my own clinical experience that there are several types of toxemia.

Dr. Porter: It seems to me it is easy to explain the difference in these types as being more apparent than real. Is it true that the advent of pregnancy will explain all of these symptoms of toxemia? I do not think that it is so. If it is so, how do you explain those cases in which pregnancy has not taken place; yet the toxemia develops to the same degree as when pregnancy is present. The thyroid holds a large place in the etiology of the toxemia of pregnancy.

Dr. Morgan: It has been said that these women develop an immunity against their own toxemia. Usually the woman who vomits excessively early in her pregnancy gets through her latter months nicely.

Dr. Blosser: I should like to have the symptoms of hyperthyroidism further elucidated. I have had

some good success in vomiting of pregnancy by correcting malposition of the uterus.

Dr. Porter: I would like to know if anyone has seen a case of the toxemia of pregnancy in an ectopic gestation, even including placenta praevia.

Dr. Dancer: What is the possibility of syphilis producing toxemia of pregnancy, as discovered by the Wassermann reaction?

Dr. Rhamy (in closing): There are two types of toxemia—a neurotic type, which is not a toxemia, and the toxemic type. No matter what the basis of the toxemia is, the end-product or result is a degeneration of the liver cells.

The application of Dr. Schermerhorn acted on favorably by the board of censors. Motion carried that secretary cast unanimous ballot of the society for Dr. Schermerhorn for membership. Ballot so cast. Application of Dr. Gilpin and Dr. Eberly presented.

Adjourned.

GARRETTE VAN SWERINGEN, Secretary.

Meeting of March 3, 1914

Society met in regular session in the assembly room of the Courthouse with twenty-two members present. Meeting called to order by the president. Minutes of preceding meeting read and approved.

No clinical cases.

Paper on "Psoriasis" by Dr. B. A. Blosser. Dr. Blosser also exhibited patient suffering with psoriasis.

DISCUSSION

Dr. Wheelock: Typical cases of psoriasis are seldom mistaken for anything else. Occasionally syphilis may confuse. Crookar of London thinks psoriasis is a contagious disease. The lesion may be produced by scratching the healthy skin of the patient who is the victim of psoriasis.

Dr. McOscar: We know very little of the etiology of psoriasis. I would doubt if arsenic given over a period of years would produce cancer as in the case report given by the essayist.

Dr. Porter, Jr.: I saw a case in a room mate in which the original lesion was a scratch produced by a garter. Scaling began. This patch is still present.

Dr. Blosser (in closing): Arsenic produces thickening of the skin and in this case reported was the only etiologic factor of cancer present.

Dr. McEvoy read a brief paper on "Observations of Severe Throat Lesions."

DISCUSSION

Dr. Edlavitch: I would not hesitate to say that a discussion of "sore throat" is a very fascinating field. In the case reported by Dr. McEvoy the infection was a pure pneumococcus. Although the diagnosis made from the smear of a throat is hardly sufficient for accurate diagnosis, yet a fair idea of the type of infection may be obtained in this way. These patients are extremely ill. They have marked pyrexia, and effusion into the serous cavities is sometimes significant of these infections. It is not surprising that epidemics of pneumococccic sore throat should occur from time to time, for the pneumococcus is an inhabitant of a normal throat.

Dr. Weaver: I want to emphasize the importance of keeping these cases at rest following attacks of sore throat. We know that tonsillitis produces secondary conditions. The well-known work of Billings and Rose-

nau on this subject is of great interest. I had a case in a nurse who had just left a case of diphtheria. She developed sore throat with a patch of membrane on the tonsil, culture showed pure staphylococci but antitoxin was given. The case ran a typical course; a culture later on in the disease showed diphtheria.

Dr. McOscar: We should not wait for culture in these cases but give the antitoxin immediately and get the report later.

Dr. Bruggeman: It is a well-recognized fact that cultures from diphtheria throats frequently show staphylococci and that diphtheria cultures are not obtained until later in the disease.

Dr. Zehr: One case of mine seems to have developed a nephritis following an acute tonsillitis.

Dr. Morgan: I want to protest against the taking of scarlet fever and diphtheria cases to St. Rochus Hospital. There are too many tuberculous cases there.

Dr. Porter, Jr.: Pneumococcal infection is an original infection with a local expression in the lungs and the germ can be isolated from the blood. I want to protest against the establishment of quarantine from a clinical diagnosis alone, for when a culture is found negative in a case which was clinically positive, the law necessitates the keeping up of a quarantine for the usual length of time.

Dr. Bulson, Jr.: Sixty per cent. of all the sinus troubles we treat are due to the pneumococcus. A majority of the mastoid cases which come to operation are due to pneumococcal infection. I have had as good success with vaccine as with anything else in a chronic infection.

Dr. McEvoy (closing): I believe that pneumococcal sore throat is a distinct entity. Some of these cases are rapidly fatal.

No business. Adjourned.

Meeting of March 10, 1914

Society met in regular session in the assembly room of the Courthouse with twenty members present. Society called to order by the president. Minutes of previous meeting read and approved as read.

Clinical case night.

Dr. Grandy reported the following cases for Dr. Duemling:

CASE 1.—Mrs. M.; age 28; housewife; married; father and mother living and well; married at 16; four children, all well; oldest 12 and youngest 3 months; entered hospital Feb. 14, 1914; usual diseases of childhood; acute nephritis one year ago; got well under diet and medical treatment for three months; twelve years ago had several attacks of pain in the epigastric region accompanied by nausea and vomiting; pain radiating toward the back and relieved by vomiting. Four years ago had a similar attack; a slight attack of the same nature took place two years ago. Yesterday morning patient was seized with an acute severe attack of pain in the epigastric region; nausea and vomiting and was soon in a state of collapse. She entered the hospital this evening in extreme shock; temperature 95.8 F.; pulseless; marked abdominal distention and intense pain in the epigastric region; blood showed 10,000 leukocytes with 72 per cent. polymorphonuclear cells. Owing to the extreme shock present it was deemed wise not to subject this patient to a laparotomy for fear of death on the table. She was put to bed and measures taken to combat the shock. On the second day blood showed 16,000 leuko-

cytes; polymorphonuclears 72 per cent.; subnormal temperature and extremely rapid pulse. She continued to improve and on the sixth day following her admission to the hospital the blood was 14,200 leukocytes, polymorphonuclears, 76 per cent. She was operated on, section revealing hemorrhage behind pancreas. Rubber-tube drainage with iodoform gauze was instituted; diagnosis acute hemorrhagic pancreatitis.

CASE 2.—Mr. M. S., Grabill, Ind. Admitted Jan. 27, 1914; age 67; married; farmer by occupation; German. Family history.—Father died of apoplexy at the age of 84; mother died of senile gangrene at 60; one brother died of tuberculosis; one brother living and well. Previous history.—Ordinary diseases of childhood; small-pox at 10 years of age; has been in good health since that time until one year ago. During last year has not been well, yet has been able to work. Complaints of tired feeling and loss of appetite. On January 25 he suffered from an acute attack of severe pain in abdominal region; nausea and vomiting; entered hospital on the 27th, suffering with a partial bowel obstruction; pulse 80; temperature 99 F.; great distention of abdomen; vomiting; some relief of distention by enema; laparotomy was done, revealing gangrene of 9 inches of small bowel which was resected; anastomosis completed by suture; small rubber drain instituted; diagnosis, mesenteric thrombosis.

DISCUSSION

Dr. B. Van Sweringen: Both cases seem to be remarkable for the fact that they recovered. Moynihan, in his work of "Abdominal Surgery," cites forty-seven such cases of mesenteric thrombosis with four recoveries. The diagnosis is not made until operation. In this case diagnosis was made before operation. It is interesting to note that while the blood-supply is rich in the intestine, yet a thrombosis of the superior mesenteric artery produces gangrene of the gut. The condition is more common in the presence of arteriosclerosis. I was unable to find, in reading this subject to-day, that recovery was frequent in acute pancreatitis.

Dr. Porter: The time is coming when a difference will be made between hemorrhage in the pancreas and hemorrhagic pancreatitis. Hemorrhage into the pancreas without infection is not necessarily fatal. Acute infection, plus hemorrhage is fatal. In these cases the pancreas rapidly becomes gangrenous and septic. The smaller artery of the mesentery in this case reported was plugged or else a larger amount of gut would have become gangrenous, and I think that is the reason for his recovery.

Dr. Weaver: I do not believe that the last reports on acute pancreatitis will bear out Dr. Porter's or Dr. B. Van Sweringen's statements. In looking up this subject, if I remember correctly, the prognosis is 30 per cent.

Dr. Bruggeman: Bier, Braun and Kimmel give in their own statistics 30 per cent. of recoveries in acute hemorrhagic pancreatitis. The history of acute pain is symptomatic of an apoplexy of the pancreas. I do not believe that all acute pancreatitis (septic or non-septic) die.

Dr. Porter: I have had a personal experience of cases of what I call acute pancreatitis and none of them lived longer than three days. I would not call a case that lasted three or four days, and was then in condition to be operated on, an acute pancreatitis.

Dr. Porter, Jr.: It is the view of pathologists that an acute pancreatitis can cure itself occasionally without operation. This is almost incontrovertible in light of what has just been said. I have seen, I believe, a case in which just such a thing occurred.

Dr. Carey gave a case report and exhibited Roentgen-ray plate of a case diagnosed primary sarcoma of the lung.

Dr. Weaver: In running over the question of tumor of the lung recently, I found that primary carcinoma is rare, and that primary sarcoma is decidedly less common. In the absence of a post mortem it would not be known definitely if this case is a primary disease of the lung.

Dr. Bruggeman: This man did not have symptoms of primary sarcoma of the lung. He went along until the tumor involved the pleura. I would believe that this growth originated in the mediastinum.

Dr. Porter, Jr.: Sarcoma can occur and involve bone-marrow without any change in the blood-picture.

Dr. Porter: The shadow in this Roentgen-ray picture is one that you would get if anything filled up the pleural sac.

Dr. Edlavitch: This case is very interesting. Before deciding that a case is primary we must remember that sarcoma of the lung is four times as rare as carcinoma of the lung. Whenever you have a case of primary cancer of the lung it is your duty to place it on record permanently. In order to decide that the growth in the lung tissue is primary, two things must be done. First, a thorough post mortem must be held; second, a microscopic examination must be made, not of an isolated gland here and there, but of all the tissues connected with the growth. There are several features of this case which stamp it as a primary sarcoma of the lung; i. e., cough, hemoptysis, etc. Most cases are mistaken for pulmonary tuberculosis.

Applications of Drs. Eberly and Gilpin acted on favorably by the Board of Censors. Motion made and carried that the secretary cast the unanimous ballot of the society for Drs. Eberly and Gilpin for membership. Ballot so cast. Adjourned.

GARRETTE VAN SWERINGEN, Secretary.

THE MUNCIE ACADEMY OF MEDICINE

Meeting of Oct. 30, 1914

Regular meeting of Muncie Academy of Medicine convened in parlor of Y. M. C. A. building on Friday evening, October 30, and was called to order at 8 p. m. by President O. E. Spurgeon, M.D.

The program of the evening consisted in reports of results in the use of vaccines and bacterins. Dr. D. M. Green told of using both stock and autogenous preparations in pyorrhea. If used early, results are prompt. Where there is no destruction of tissue or the teeth not loose, the trouble disappears in from six weeks to three months. Dr. O. E. Spurgeon does not believe in explaining to all patients just what he is doing in the way of treatment nor what he is using. He reports a case of capillary bronchitis in a 7-year-old boy, with a steady temperature of 106 F.

Fever was brought to normal in four days after administration of first dose of bacterins.

Dr. C. M. Mix told of a patient, a man 55, who when admitted to the hospital weighed 80 pounds, and was expectorating one quart of mucopurulent matter each twenty-four hours. He was given bacterins for mixed infection and in five months weighed 150 pounds, and was able to return to his work as glass-blower.

Dr. E. S. Green especially recommends use of bacterins in pneumonia, pustular acne and mixed infection of the bladder. In the latter, autogenous vaccines are made from urinary sediment. In one patient the improvement was 80 per cent. in three weeks.

H. D. FAIR, Secretary.

Meeting of Nov. 13, 1914

Academy met November 13 at usual time and place, and was called to order by Dr. O. E. Spurgeon, president.

Evening spent in an interesting and very profitable discussion of medical treatment of exophthalmic goiter. Dr. H. S. Bowles told of a patient benefited by soluble iodine and made worse when thyrodectine was substituted for iodine. Dr. Mix made a very clear exposition of the part iodine plays in the treatment, by demonstrating that goiter is a reaction to iodine starvation, and that the exophthalmos was, in some instances at least, an added element, probably of nervous origin. Overdoses of iodine may cause too rapid absorption of the hypertrophied tissue and produce thyrotoxicemia. Dr. W. D. Whitney expressed the opinion that there might be some systemic cause for tremor, tachycardia and exophthalmos, other than enlarged gland. He spoke of the advantage of tablet triturates of the lower Homeo. potencies in treatment of goiter. Drs. F. E. Hill, F. W. Dunn and several others took an important part in the discussion.

H. D. FAIR, Secretary.

Meeting of Nov. 20, 1914

The Muncie Academy of Medicine met in regular session in parlor of Y. M. C. A. building and was called to order at 8 p. m. by President O. E. Spurgeon, M.D.

Report of clinical cases proved of such interest that the whole evening was devoted to their study. One case was that of a professional man of 39, who in childhood had been subject to "bilious attacks," including sick headache, catharsis, vomiting, pain in the right side, and dizziness. When 16 years old the patient was suddenly attacked by a severe pain in the right side, became semiconscious and remained so for three days. He was taken to hospital and diagnosis of abscess of liver was made. He was very sick for five weeks, when abscess drained through bowels. He was in the hospital for seven months, but believes, in the light of subsequent knowledge, that his abscess might have been appendiceal rather than hepatic. After a slow convalescence he remained well and vigorous for twenty-two years, but for the last year has had occasional dizzy spells with nausea. The attacks are preceded by roaring in the head and deafness for two or three days, followed by dull headaches. Light hurts the eyes and objects become distorted. Emesis occurs from ten to ninety minutes

after eating and the ejected matter is sweet to the taste. After vomiting and catharsis he feels relieved only when reclining with his eyes closed. He can walk only when assisted. Symptoms last from twenty-four to thirty-six hours, after which he resumes his usual occupation.

In making a diagnosis, Meniere's disease, organic and functional impairment due to old adhesions, auto-toxemia, and psychoneurosis were considered. In differentiating, Dr. Mix contended that the lack of history of definite pathology, and the relief of symptoms when the patient stayed in bed made the diagnosis of Menier's disease improbable. Neither did he believe that the indications at this time warranted a laparotomy.

H. D. FAIR, Secretary.

Meeting of Nov. 27, 1914

The subject for discussion at the Muncie Academy of Medicine on this date was "Headache," and was considered from the point of view of the general practitioner by Dr. F. W. Dunn of Gaston, who was impressed by the radical difference of opinion of the "authorities." For instance, Butler and others place great importance on cranial areas involved when determining the etiology of headaches, while Cabot and still others dismiss this detail as of no practical importance. A diagnosis should include (1) an examination of eyes, (2) temperature record, (3) blood-pressure, (4) consideration of neuralgia, (5) palpation of nape muscles at occiput, (6) examination of nose and accessory sinuses, (7) regularity of paroxysms, (8) psychoneurosis, (9) regularity of onset of pain.

Dr. J. M. Quick discussed the subject from the point of view of the eye specialist, saying: Two-thirds of patients coming for glasses have headache. Twelve external and two internal muscles must work in harmony in normal binocular vision. Few eyes are perfect, even approximately. Normal eyes make no accommodation for distance, just near vision. Patients who are young and strong will overcome much refractive error, but poor health is likely to make the defect apparent. Diseases such as measles are likely to be followed by eye troubles. Small refractive errors may cause more trouble to the patient than great ones. Principle signs of refractive errors are brow pain, watering of the eyes and blurring of vision. Muscular anomalies are indicated by pain in the nape of the neck and occiput.

The weekly quiz was conducted by Dr. W. J. Molloy.

H. D. FAIR, Secretary.

DEARBORN-OHIO

The Dearborn-Ohio Medical Society held their annual election of officers November 20, at Aurora. The following officers were elected: Dr. G. H. Hansell, president; Dr. F. M. Mueller, vice-president; Dr. J. L. McElroy, secretary-treasurer.

The meeting, which was an open one to the physicians' wives, was addressed by Dr. F. B. Wynn of Indianapolis, newly elected president of the State Association.

A 6 o'clock dinner was served preceding the meeting. Adjourned.

H. H. SUTTON.

DELAWARE COUNTY

Regular meeting of Delaware County Medical Society was held in Muncie Y. M. C. A. building, Friday, November 6, and was called to order at 8 p. m. by President D. M. Green, M.D.

Dr. W. A. Hollis of Hartford City told of a remarkable accident. A young child was struck by a falling pane of glass which completely severed the cartilaginous portion of the nose, including both alae, down flush with the cheeks and lip. Under a continuous stream of warm salt solution prompt repair was made which resulted in union by first intention. Establishment of circulation was due to accurate apposition and excellent coaptation.

The principal speaker of the evening was Dr. Ernest DeWolf Wales of Indianapolis who spoke on "The Treatment of Acute Diseases of the Ear, Nose and Throat." Dr. Wales illustrated his talk by the use of the blackboard and osteologic and other anatomic models, and said in part: The general practitioner should make a more careful examination into the details of infection of upper orifices of body, for early and intelligent treatment saves life and later surgical procedures. More diseases of the respiratory tract are due to overheated houses and impure air than to cold.

Lack of inspection and attention to ear drum results in meningitis and deafness. A diagnosis should be made before there is a purulent discharge from the ear. Bulging, and a white area always indicate the advisability of an incision, as do also a high fever and a loss of landmarks. An incision always shortens the disease and is not difficult, as the membrane is easily seen, and preparation is accomplished by filling the canal with warm alcohol which is allowed to drain away after a few seconds. An anesthesia is not necessary except in nervous or frightened children, but the patient's body should be wrapped in a sheet in order to restrain any movements of the arms that might interfere with the operator.

In acute otitis media, as in most other ear troubles, "drops" are of no value except that due to the heat imparted by the solution. After incision the concha, not the canal, is packed with gauze, then the ear and mastoid area is well padded and the gauze saturated with alcohol. This is not an office operation, and rest in bed should be enforced in all diseases of the head cavities. In every middle-ear inflammation there is also involvement of the mastoid cells, and the only treatment for either is free drainage. Inspection of ear drum is just as essential to good practice as is percussion or auscultation.

In all severe cases of tonsillitis, cultures should be taken. When first seen the area should be painted with a solution of argyrol and appropriate systemic treatment begun. Over treatment by irritating local applications should be avoided. Gargles are of no practical use because the liquid rarely touches the tonsils. Show the patient how to blow the nose properly so as not to force infection into the eustachian tubes. Repeated exacerbations may be due to infections of the frontal sinuses or to adenoids. In laryngitis the first step is to have the patient stop talking, and one of the best remedies is Tr. benzoin.

DISCUSSION

Dr. C. E. Miller: I believe in the early incision of all pus cavities, but correct puncture of the ear drum and the safe drainage of a frontal sinus requires the knowledge born of long experience.

Dr. W. A. Hollis: All middle-ear diseases are not of the purulent type. Relief from congestion may be attained over night. A 12 per cent. solution of phenol in glycerin is useful. In making an incision I prefer a cataract knife to the smaller spears in use.

Dr. D. M. Green: Nose and throat infections are the starting points of the more chronic conditions in other parts of the body. Appendicitis and gall-bladder diseases follow nasal and postnasal infections. Any point containing pus may become a foci for the spread of infection. Pus should be liberated when possible.

Adjourned.

H. D. FAIR, Secretary.

DUBOIS COUNTY

Dubois County Medical Society met in regular session at Jasper, November 24, with President L. C. Lukemeyer in the chair. Ten members were present, and one visitor, Dr. John Cosper of Jasper.

Dr. H. C. Knapp of Huntingburg read a paper on "Trachoma." He advocated a better knowledge of this disease by the laity in consideration of the danger the possessor of it offers to the public about him. The essayist warmly scored the medical profession for their indifference toward these matters. Paper freely discussed by every member present.

The following officers were elected for the ensuing year: president, Dr. O. A. Bingham; vice-president, Dr. E. Steinkamp; secretary-treasurer, Dr. S. L. McKinney.

A vote of thanks was given the outgoing officers.

Next meeting will be held in Huntingburg in January. Adjourned. S. L. McKINNEY, Secretary.

MADISON COUNTY

Madison County Medical Society met in Public Library in Anderson, Oct. 27, 1914. Meeting called to order by President S. C. Newlin, M.D. Fourteen members present.

Dr. A. C. Kimberlin gave a most interesting lecture on "Psychic Factor in Gastro-Intestinal Ptosis with Stasis." After the diagnosis is made the mental condition must be noticed and taken care of. These cases are chronic and it is essential to establish a right mental relationship to get the confidence of patient. If patient has extreme stasis and ptosis will find ptosis of all the viscera. The sigmoid is often very low and may extend to the right side of the uterus, or may be unnaturally high. From an anatomic point of view it is incurable and we must be careful of promises made to patients. They are notoriously predisposed to tuberculosis, they look to be anemic but are not, may have an icteroid appearance which clears up under proper treatment.

A vote of thanks was tendered Dr. Kimberlin by the society.

Adjourned.

Meeting of Nov. 24, 1914

Meeting called to order by President S. C. Newlin, M.D. Eighteen members present.

Minutes of previous meeting read and approved.

Dr. Chas. D. Humes of Indianapolis read a paper on "Treatment of Cerebrospinal Syphilis." The intermediate ground between early syphilis and so-called parasyphilis is occupied by more or less inflammatory

condition of central nervous system including the different forms of meningitis, gumma and the affections of the cranial nerves and the spinal nerve roots. The point which should be driven home is that the individual who goes into a state of nervous collapse or a profound physical decline from the result of a previous specific infection is not suffering from damage done in the beginning but from the sum total effect of the uninterrupted infection, so that instead of viewing many of these cases as incipient paresis they should rather be looked on as straight out-and-out uncured syphilitics. Since advent of Wassermann and associated laboratory discoveries the old writers have very graciously torn out those lines which set up a definite classification and are less willing than ever before to say just where the inflammatory process leaves off and actual degeneration begins. We should not forget that a negative Wassermann does not rule out syphilis as the spinal fluid may be a 100 per cent. positive. The blood-stream can be cleared probably in a majority of cases with the old mercury and iodid treatment, but it takes a much longer time and the reaction delayed, so that there is no questioning the choice of salvarsan for its efficiency and its prompt action coupling mercury with it always. In cerebrospinal syphilis it is proved that arsenic, mercury and iodine never reach the neural canal. The patient's own salvarsanized serum should be used after withdrawal of an equal amount of cerebrospinal fluid. If all cases of active syphilis were followed through carefully to complete cure or even properly cared for in early cerebrospinal involvement we could hope in ten years to make a wonderful change in the population of our insane hospitals.

Dr. M. A. Austin read a paper on "Hyoscin-Scopolamin-Morphin Anesthesia with Special Reference to Seven Years' Obstetric Experience with Twilight Sleep." Dr. Austin called attention to the fact that the hyoscin-morphin combination acts as a cardiac stimulant and a respiratory depressant and that this fact must be reckoned with for the safety of the child, as there may follow a fatal asphyxia. Watching the effect of hyoscin or scopolamin on various patients to whom I have given it during confinement made me formulate a method of procedure which I believe to be fairly safe. Use of the preparation depends on one's ability to accurately approximate the probable duration of the second stage of labor. If one is uncertain as to the time that will elapse before the child is born I believe it is an unsafe drug to use. If labor will be terminated within two hours the absorption of the drug by the mother and the amount of the drug that will be absorbed by the child from the mother's circulation will probably not be sufficient to affect the respiratory center of the baby. However, should the hypodermic be given to the mother and the child not be born for three hours or more after giving the drug there will be grave danger of the child absorbing enough of the drug to seriously interfere with respiration and possibly produce fatal asphyxia. A safe rule is to give one-half size dose when the os is fully dilated and another when the head presses the perineum. This is an accurate way of anticipating the termination of labor within a short time because very few cases last over a half hour after the head presses the perineum and a majority are delivered within two hours after the os is fully dilated.

ETTA CHARLES, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1914, and, in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

SLEE'S NORMAL HORSE SERUM.—Marketed in vials containing 100 Cc. Abbott Alkaloidal Company, Chicago.

DIPHTHERIA ANTITOXIN.—Marketed in packages of 10,000 units ready for use. Memorial Institute for Infectious Diseases, Chicago.

CONCENTRATED DIPHTHERITIC ANTITOXIN.—Marketed in syringe packages containing from 500 to 7,500 units. F. Stearns & Co., Detroit, Mich.

BACILLUS COLI COMMUNIS VACCINE.—Marketed in boxes of 6 ampoules. E. R. Squibb & Sons, New York City.

STAPHYLO-ACNE VACCINE.—Marketed in boxes of 6 ampoules. E. R. Squibb & Sons, New York City (*Jour. A. M. A.*, Nov. 14, 1914, p. 1763).

PYOCYANEUS VACCINE.—Marketed in boxes of 6 ampoules. E. R. Squibb & Sons, New York City.

STREPTOCOCCUS VACCINE.—Marketed in boxes of 6 ampoules. E. R. Squibb & Sons, New York City.

FRIABLE TABLETS OF EMETINE HYDROCHLORIDE, MULFORD.—Each tablet contains emetine hydrochloride 0.032 gm. H. K. Mulford Co., Philadelphia, Pa.

ANTIRABIC VACCINE.—Consisting of eighteen doses, one dose is sent by mail daily. Pasteur Institute of St. Louis, St. Louis, Mo.

TYPHOID VACCINE, IMMUNIZING.—Marketed in packages of three syringes and in packages of 3 ampoules. H. M. Alexander & Co., Marietta, Pa. (*Jour. A. M. A.*, Nov. 28, 1914, p. 1953).

PROPAGANDA FOR REFORM

ECKMAN'S ALTERNATIVE.—Eckman's Alternative is a "consumption cure" patent medicine consisting essentially of alcohol, calcium chlorid and cloves. Now the Eckman concern is running a series of advertisements in which medical writings on the use of calcium in tuberculosis are twisted into recommendations for the nostrum (*Jour. A. M. A.*, Nov. 7, 1914, p. 1686).

THE FRIEDMANN TREATMENT.—An investigation made by the U. S. Public Health Service of the validity of the claims made for the Friedmann treatment of tuberculosis is a complete refutation of Dr. Friedmann's claims, not only as to having developed a specific cure for tuberculosis but also as regards the harmlessness of the treatment. The report of the investigation shows the flimsy evidence on which the Friedmann method for the treatment of tuberculosis was based (*Jour. A. M. A.*, Nov. 7, 1914, p. 1673 and 1690).

THE ACTION OF IODIDS ON BLOOD VESSELS AND HEART.—The iodids, especially potassium iodid, have been credited with having a blood-pressure lowering action and have been used extensively in the treatment of arteriosclerosis. D. I. Macht has demonstrated that the iodid ion, instead of depressing the heart and vessels, has a marked stimulating action and that if potassium iodid lowers blood-pressure it must be the effect of the potassium part of the compound (*Jour. A. M. A.*, Nov. 14, 1914, p. 1767).

AGAR-LAC.—Agar-lac, sold by E. Fougera & Co., is stated to be composed of "Agar-Agar with lactic

ferments, gr. 4½, phenolphthalein, gr. ½." Regarding the "lactic ferment," the expert of the Council on Pharmacy and Chemistry reported that *Bacillus bulgaricus* were present in small numbers only and that there were at least two other bacteria present. The council refused recognition to Agar-lac because its composition is not correctly declared, because it is exploited in a way to cause laymen to use it to their detriment, because unwarranted therapeutic claims are made for it, because its name does not indicate the most potent constituent, phenolphthalein, and because the use of a ready-made combination of cathartic drugs with lactic acid ferments is unscientific (*Jour. A. M. A.*, Nov. 14, 1914, p. 1777).

ASEPTICONES.—Asepticones, sold by the Chinosol Company, are vaginal suppositories stated to contain salicylic acid, boric acid, quinin and chinosol. On the basis of the evidence submitted the Council on Pharmacy and Chemistry voted that Asepticones be refused recognition because unwarranted and misleading therapeutic claims are made; because the name does not indicate the potent constituents and because it was considered an unscientific shotgun mixture (*Jour. A. M. A.*, Nov. 14, 1914, p. 1778).

BACILLICIDE.—Bacillicide, sold by the Prophyl Products Company, Richmond, Va., is an unscientific solution of the Glyco-Thymoline type. It was refused recognition by the Council on Pharmacy and Chemistry because its composition is secret, because unwarranted and exaggerated claims are made for it and because the use of complex mixtures of uncertain composition is unscientific and contrary to the best interests of the public (*Jour. A. M. A.*, Nov. 14, 1914, p. 1778).

IRON SOLUTION FOR INTRAVENOUS THERAPY.—This solution, manufactured by Perkins & Ross, Colorado Springs, Colo., contains soluble iron phosphate as its essential constituent and is recommended as a "chalybeate, emmenagogue and tonic." As the intravenous administration of a drug like iron, which must be continued for long periods, cannot be considered the method of choice, as the composition of the solution is such that changes may occur on standing, etc., which would make the preparation dangerous, and as the method of marketing the solution does not insure its sterility, further increasing the danger of its use, the product was refused recognition by the Council on Pharmacy and Chemistry (*Jour. A. M. A.*, Nov. 14, 1914, p. 1778).

MAIGNEN ANTISEPTIC POWDER.—This powder, exploited by the Maignen Institute, Philadelphia, is stated to be composed of calcium hydroxid, sodium carbonate, aluminum sulphate and boric acid and its action depends on the sodium hydroxid which forms when the powder is treated with water. It is advertised both to physicians and the public by means of claims which are extravagant, preposterous and dangerous. Thus a pamphlet gives directions for the sterilization of the nose, throat, stomach, lungs, eyes, gums, mouth and the genito-urinary tract. Its use is claimed to prevent blood poisoning, lockjaw, hydrophobia and infectious diseases and mothers are invited to treat their babies' ailments with it (*Jour. A. M. A.*, Nov. 14, 1914, p. 1778).

RADIUM EMANATION ACTIVATORS.—Outfits for charging drinking water with radium emanation are now widely and extravagantly exploited. For an apparatus which imparts 2,500 mache units to water each day as much as \$200 is asked. Theoretically, seventy-two cents worth of radium can produce 2,500 mache units of emanation per day. Even if, because of mechanical difficulties twenty times as much radium were required to be present in the activator, the cost of the radium in this \$200 apparatus would be only \$14.40 (*Jour. A. M. A.*, Nov. 14, 1914, p. 1780).

LYSOFORM.—Lysoform and Crude Lysoform, made by the Lysoform Gesellschaft, Berlin, Germany, are solutions of potash-soap stated to contain respectively 6-7 and 10 per cent. of formaldehyde. These preparations were refused recognition by the Council on Pharmacy and Chemistry because unwarranted claims were made in regard to their efficiency and because their indiscriminate use for the treatment of diseases was recommended (*Jour. A. M. A.*, Nov. 21, 1914, p. 1870).

PHECOLATES, PHECOLAX, PHECOZYMES AND PHECOTONES.—These are tablets put out by F. Waldo Whitney designed to form part of a system of treatment founded on the theory of autotoxemia. The different mixtures consist in the main of well-known remedies, one of them containing ten constituents. Most extravagant claims are made for these mixtures. The Council on Pharmacy and Chemistry voted to refuse them recognition as unscientific shotgun mixtures and because the names do not indicate their potent constituents (*Jour. A. M. A.*, Nov. 21, 1914, p. 1870).

SERUM VACCINE, BRUSCHETTINI.—This vaccine, sold by R. G. Berlingieri, New York, has for its aim the destruction of the tubercular cell and the facilitation of its elimination by the natural expulsive processes. The manufacturer not having submitted proof of the value of the preparation, the Council on Pharmacy and Chemistry voted that it be refused recognition. Later, information was received that the preparation was now used only in slight cases (*Jour. A. M. A.*, Nov. 14, 1914, p. 1870).

SHERMAN'S NON-VIRULENT TUBERCLE VACCINE.—This product of G. H. Sherman, Detroit, was refused recognition by the Council on Pharmacy and Chemistry because the far-reaching claims made for it were not substantiated by suitable evidence (*Jour. A. M. A.*, Nov. 21, 1914, p. 1870).

WHITE SULPHUR SALTS.—This is an effervescent salt put on the market by the White Sulphur Springs, Inc. It was refused recognition by the Council on Pharmacy and Chemistry because it did not represent the water of White Sulphur Springs, Va., as claimed (*Jour. A. M. A.*, Nov. 21, 1914, p. 1870).

UNGUENTUM SELENIO VANADIC, v. ROEMER.—This ointment, marketed by Schering & Glatz, New York, is claimed to contain selenium oxycyanid and vanadium chlorid. No evidence of the value of the preparation either in carcinoma or in any of the very long list of other diseases in which it is recommended was submitted. The pharmacologic evidence that such a preparation would be of value in such conditions being practically nil, the Council on Pharmacy and Chemistry refused recognition to the product (*Jour. A. M. A.*, Nov. 21, 1914, p. 1870).

IODIA.—Iodia (Battle & Co.) is claimed to contain potassium iodid in combination, with iron phosphate and vegetable "principles." It is extravagantly recommended for use in many and varied conditions. It is asserted to be "almost a specific" in eczema and rheumatism and "a highly efficient form of iodine." The A. M. A. Chemical Laboratory having shown that untrue statements in regard to the composition and preparation are being made, the Council on Pharmacy and Chemistry refused recognition to Iodia on this account: because unwarranted therapeutic claims were made and because the use of this complex mixture is unscientific and a detriment to the profession and the public (*Jour. A. M. A.*, Nov. 21, 1914, p. 1871).

NARCOPHIN.—Narcophin consists of morphin meconate and narcotin meconate in molecular proportions. It is claimed to be a scientific substitute for opium and to have advantages over morphin. The Council on Pharmacy and Chemistry was unable to accept the therapeutic claims made for it (*Jour. A. M. A.*, Nov. 21, 1914, p. 1872).

BOOK REVIEWS

THE READY REFERENCE HAND-BOOK OF DISEASES OF THE SKIN. By George Thomas Jackson, M.D., Professor of Dermatology in the College of Physicians and Surgeons, Medical Department of Columbia University, New York. Seventh edition, thoroughly revised. 12mo, 770 pages, with 115 engravings and 6 colored plates. Cloth, \$3.00 net. Lea & Febiger, Philadelphia and New York, 1914.

As a reference hand-book the work is unexcelled. The alphabetical arrangement of the subjects is a distinct advantage. The symptomatology and treatment of each disease is taken up in a clear and concise form and while the descriptions are brief, nothing of importance in connection with the disease under discussion is lacking in the least. The best part of the work in our opinion is the part devoted to treatment. The book is well illustrated. As the author states in his preface, his aim has always been to furnish students and practitioners with a comprehensive yet compact exposition of dermatology. We should say that his aim has been fulfilled.

ABDOMINAL OPERATIONS. By Sir Berkeley Moynihan, M.S. (London) F.R.C.S., Leeds, England. Third edition, entirely reset and enlarged. Two octavo volumes totaling 980 pages, with 371 illustrations, 5 in colors. Cloth, \$10.00 net; Half Morocco, \$13.00 net. Philadelphia and London: W. B. Saunders Company, 1914.

The author in this edition adheres to his original plan and considers no gynecological operations nor operations on the kidney and bladder, nor hernia operations.

Like former editions also this one bears a strong personal impress which adds to the value of the work and to the pleasure one derives from reading it.

About one-third of the first volume is given to a consideration of general topics and the remaining two-thirds of this volume together with the whole of the second volume is given to a consideration of special operations.

I was disappointed in not finding anything in the work on the subject of splenectomy for pernicious anemia.

The glazed paper on which the volumes are printed gives itself admirably to the illustrations, which by the way are numerous and fine, but detracts from the enjoyment of reading it. Any one who reads the work will be convinced that it is the product of one who has mastered the subject, and is able to tell what he knows in a most convincing and entertaining way. The numerous and explicit references add much to the value of the work. The author's very graceful acknowledgment of his debt to American surgeons is deserving of notice and will give added pleasure to his American readers. The publisher's work is entirely satisfactory. No surgeon can afford to do without these volumes.

A MANUAL OF DISEASES OF THE NOSE, THROAT AND EAR. By E. B. Gleason, M.D., Professor of Otology in the Medico-Chirurgical College, Philadelphia. Third edition, thoroughly revised. 12mo of 590 pages, 223 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$2.50 net.

This is in every way an excellent manual for the use of students and general practitioners. We can scarcely conceive of a work of this kind being more

concise and yet losing nothing in clearness by brevity. Nothing seems to have been omitted, and careful revision of the preceding edition brings this one thoroughly up to date. The author very wisely recommends acquiring operative technic by operations on the eadaver. He also follows the general trend of opinion held by the better class of surgeons in recommending conservatism in intranasal operations. The suggestion is offered that beginners in this special work should not attempt the more difficult operations, though we cannot quite agree with him that tonsillectomy and submucous resection of the nasal septum are easy of performance, even though they are among the commoner operations. The chapter on the functional tests of the hearing expresses the subject as clearly and in as few words as it is possible to have this rather complicated subject considered. Some of the other chapters are equally as worthy of commendation for their complete yet concise discussion of subjects. The illustrations are quite satisfactory, though a few more covering operative measures would help to further elucidate the text. The formulas in the back part of the book may prove helpful.

THE TONSILS—FAUCIAL, LINGUAL AND PHARYNGEAL.

By Harry A. Barnes, Instructor in Laryngology, Harvard Medical School; Surgeon in the Department for Diseases of the Nose and Throat, Boston Dispensary; Assistant Laryngologist, Massachusetts General Hospital. 168 pages. Cloth, \$3.00. C. V. Mosby Company, Publishers, St. Louis, 1914.

This is an interesting book and is needed at this particular time when so much truth and fiction is published concerning the tonsils and their functions. The author does not lay claim to having settled any of the mooted questions, but he does claim to have put into concise form the demonstrable facts concerning the lymphoid tissues of the throat, and to make these facts the basis of any theories advanced. The more strictly scientific parts have been written with a view to emphasizing their practical application to clinical work.

Concerning the function of the tonsils, the author makes a very rational statement when he says that the histologic structure of the tonsils is identical with that of the other lymphoid nodules throughout the alimentary and respiratory tracts, and its physiologic significance is undoubtedly the same. Many of the illogical theories concerning the functions of the tonsils are dismissed with logical explanations as to why such theories are not worth acceptance. Concerning the function of the tonsil as it relates to operative procedures, the author says that in spite of the countless number of tonsillectomies done during the past few years, not one has been shown to have had any untoward result that could be attributed to the loss of any possible functioning power. He further states that the histologic structure of the tonsils shows plainly that their function, whatever it may be, is identical with that of the other lymphoid nodules of the body, and therefore one that would be missed no more in its removal than the function of a small area of skin would be missed. On the other hand, the idea that the tonsils have no function, or that it is one that easily may be spared, has led, in many quarters, to the condemning of all tonsils that show their heads, so to speak, beyond the faucial pillars, even when no symptoms are present, or only

such as could be attributed to them by the utmost stretch of imagination. The author says that it is difficult to say which attitude is productive of the more mischief. On the one hand many patients are allowed to suffer the ill effects of chronic toxic absorption or of recurring acute inflammatory conditions, when a simple enucleation is all that is necessary to give them complete relief; while on the other, perhaps a much larger number of patients are put through a needless operation which a more careful study of the individual case might obviate. The tonsils should not be removed without adequate cause, but when such cause exists the loss of their functioning power should not be used as an argument against their complete extirpation. The author condemns the old, inadequate tonsillotomy or the milder galvanocautery applications to the crypts, though he discusses in a comprehensive way all manner of surgical procedures including the more approved operation of tonsillectomy.

The book is well illustrated and altogether forms a very practical and timely work on a subject that just at the present time is of great interest to the medical profession as a whole.

A TEXT-BOOK OF THE DISEASES OF THE NOSE AND THROAT. By Jonathan Wright, M.D., Director of the Department of the Laboratories, New York Post-Graduate Medical School and Hospital, and Harmon Smith, M.D., Surgeon to Throat Department of the Manhattan Eye, Ear, Nose and Throat Hospital; Clinical Professor of Laryngology and Rhinology, Cornell University Medical School. Octavo, 683 pages, with 313 engravings and 14 plates. Cloth, \$5.00 net. Lea & Febiger, Publishers, Philadelphia and New York, 1914.

The striking thing about this text-book is its originality. Morbid processes have been considered with due regard to the histology and physiology of the mucous membranes of the upper respiratory tract. Many of the opinions expressed concerning the etiology and pathology are based on information derived through original investigation pursued for many years in the laboratory and in the clinic by the authors. Aside from the chapters that are usually found in nose and throat text-books, the authors have included chapters on Office Equipment and Methods of Examination; External Deformities of the Nose and Their Correction; Inflammations of the Buccal Cavity; Buccal Lesions in Dermatoses; Buccal Drug Lesions; The Keratoses and Mycoses; Glanders: Anthrax, Etc.; Tumors of the Tongue, Oropharynx and Nasopharynx; The Nose and Throat in General Diseases, and Foreign Bodies in the Larynx and Bronchi. The various affections of the accessory sinuses are considered as sequelae of chronic rhinitis, as are also deviations and spurs of the nasal septum, septal perforations, synechia and epistaxis. Practically all of the late approved operative procedures are fully described and many of them well illustrated. Throughout the text one notes the personal equation which has influenced the writers in the expression of many theories concerning etiology and treatment of diseased conditions, but nowhere can be found anything that is not in keeping with advanced thought and rational management of nose and throat cases. The work deserves and undoubtedly will receive appreciation at the hands of the medical profession. It is a credit to two well-known authorities.

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